Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Interior Design Technology**
Career Cluster: **Arts, A/V Technology and Communication**

	AS	AAS
CIP Number	1404.050100	0404.050100
Program Type	College Credit	College Credit
Standard Length	75 Credit Hours	75 Credit Hours
CTSO	College DECA	College DECA
SOC Codes (all applicable)	27-1025	27-1025
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare students for initial employment in an interior design business, or an architectural or a construction firm leading to state licensing and registration as an interior designer (SOC 27-1025). Other jobs this program prepares graduates for include kitchen designer, bath designer, color consultant, display manager, buyer, assistant buyer, merchandise displayer (SOC 27-1026), sales associate, manufacturer sales representative, CAD operator, space planner, and construction/housing specifier. The state of Florida interior design licensing program requires that a student graduate from a program approved by the Florida Board of Architecture and Interior Design. Completion of studies is the first step in the process of fulfilling requirements needed to sit for the professional licensing examination adopted by the State of Florida and administered by the National Council for Interior Design qualification (NCIDQ).

A secondary purpose of the program is to provide supplemental or required training for persons previously or currently employed in the above listed occupations.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

Program Structure

The curriculum of the program includes the following: the elements and principles of design; the study of the human environment; programming; the design process and evaluation of design; technical knowledge and skills; selection and specifying of materials, furniture, fixtures, and equipment; visual and oral communication; design history; business principles and practices; lighting; space planning; codes; universal design; special populations; cultural diversions, and employability.

This program is a planned sequence of instruction consisting of 75 credit hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

- use of drafting equipment
- creation of drawings using drafting tables and CAD programs
- computer business programs unique to the field of interior design
- non-textile building materials
- textile samples
- furnishings, fixtures, and equipment used in interior design
- development, maintenance, and use of interior source library
- research, identification, and use of interior design source materials, i.e. non-textile building materials, residential and contract textiles, interior-finish materials, industry catalogs of furniture, fixtures, and equipment
- employment in the field may be considered a laboratory activity

Special Notes

The standard length of this program is 75 credit hours, Associate of Applied Science or Associate of Science degree.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Career and Technical Student Organization (CTSO)

College DECA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 75 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

> Interior Design Technology Kitchen and Bath Specialization (0404050106) – 39 Credit Hours.

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Identify and apply elements and principles of basic design to interior spaces.
02.0 Describe the interrelationship between humans and their interior environments.
03.0 Plan for space utilization and development according to identified functions.

04.0 Select and arrange furniture, equipment, and accessories.
05.0 Identify the appropriate use and function of interior furnishings and materials.
06.0 Identify, research, and specify interior design materials and resources.
07.0 Research and specify appropriate interior lighting.
08.0 Identify interior methods and systems in building construction.
09.0 Identify building codes, regulations, and legislation relating to residential and non-residential spaces.
10.0 Communicate design concepts through visual and oral presentation skills.
11.0 Demonstrate employability skills and identify job and career opportunities.
12.0 Identify business organization and development procedures and/or systems for a professional practice.
13.0 Analyze historical, cultural, and societal influences on structures, interiors, and furnishings.
14.0 Analyze the concept of readapting and/or renovating existing structures.
15.0 Incorporate evaluation, space planning, layout, workflow, and design into a project.
16.0 Coordinate the interior with the exterior of a building/residence where appropriate.
17.0 Calculate the costs involved in a budget estimate of an interior project.
18.0 Learn the process of preparing a complete set of working construction drawings of a residential building manually and/or electronically.
19.0 Identify the effects of sound on habitable spaces.
20.0 Identify egress requirements.
21.0 Design safe and universally accessible spaces.
22.0 Prepare the basic agreement between the designer and the client, identifying services and responsibilities.
23.0 Demonstrate a basic knowledge of computer skills.
24.0 Identify, research, and design sustainable interiors.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Interior Design Technology**
CIP Numbers: **0404.050100 AAS**
1404.050100 AS
Program Length: **75 Credit Hours**
SOC Code(s): **27-1025**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Identify and apply elements and principles of basic design to interior spaces--The student should be able to accomplish the following:
- 01.01 Evaluate aspects of color schemes in relation to interior design.
- 01.02 Describe the color wheel.
- 01.03 Explain the psychological effects of color on space and human interaction.
- 01.04 Define and apply the principles of design.
- 01.05 Describe the way principles of design are used in interior design.
- 01.06 Define and demonstrate the aesthetic elements of design.
- 01.07 Describe the way elements of design are used in interior design.
- 01.08 Define and demonstrate figure, ground, and spatial relationships.
- 01.09 Define and demonstrate the primary elements of design form (i.e. point line plane and volume) and their role in all aspects of interior design and architecture.
- 01.10 Describe and demonstrate the function of the visible spectrum and pigmentation as inherent properties of all design materials and their impact on color perception.
- 01.11 Describe and demonstrate knowledge of the three dimensions of color.
- 01.12 Identify common comprehensive color systems used by designers for the accurate description and specification of color.
- 01.13 Identify and apply knowledge of the results and effects of color interaction in design.
- 01.14 Identify and apply the categories of material and surface texture to appropriate interior needs and function.
- 01.15 Identify and demonstrate the role of light on our perception of surface texture in design projects.
- 01.16 Identify, describe, and demonstrate the differences between mechanical, visual, and human scale in design-related problems.
- 01.17 Identify, describe, and apply interior architectural and design elements not only to the function and use of the interior space, but also as an expressive factor in form and style.

02.0 Describe the interrelationship between humans and their interior environments--The student should be able to accomplish the following:
- 02.01 Identify personal and group needs that influence the use of each occupied space, including those of persons with special needs and of the aged.
- 02.02 Identify family needs and activities that influence space requirements.

02.03 Identify environmental characteristics of housing that affect the well being of the family.
02.04 Identify ways that environmental characteristics may be controlled to provide a healthful physical environment and conserve energy.
02.05 Identify ways that spaces influence social behavior and emotional well being.
02.06 Identify ways spaces can promote intellectual development and economic status.
02.07 Demonstrate an understanding of the Americans with Disabilities Act and how it affects the interior environment.
02.08 Demonstrate an understanding of the design needs for the elderly population.
02.09 Demonstrate an understanding of the design needs of the special needs population.
02.10 Understand the principles of ergonomics and anthropometrics in the way they condition and define natural human movements.
02.11 Identify and distinguish the difference in needs and functional concerns between residential or public space users.
02.12 Identify and apply required adjacency and spatial concerns as they apply to exterior space, visitors, and service areas in both residential and commercial interiors.
02.13 Identify and apply responses to the psychological and social needs of people using interiors as well as to their physical needs (i.e. territoriality, personalization, and group interaction).

03.0 Plan for space utilization according to identified functions--The student should be able to accomplish the following:
03.01 Identify and apply responses to the psychological and social needs of people using interiors as well as to their physical needs (i.e. territoriality, personalization, and group interaction).
03.02 Identify, describe, and demonstrate functional and aesthetic goals and objectives establishment, which direct the programming process.
03.03 Define and develop a client profile.
03.04 Identify, define, and apply known methods of collecting information and projected user requirements as fundamental to design project preparation.
03.05 Create and interpret a design matrix and other schematic processes.
03.06 Illustrate bubble diagrams and block planning.
03.07 Describe and demonstrate comprehension of spatial adjacency, utilization, circulation, light, and function.
03.08 Identify and apply the requirements of good traffic circulation.
03.09 Synthesize concepts of space utilization through sketching, schematic drawings, and models.
03.10 Apply knowledge of ergonometrics, and anthropometrics in all projects.
03.11 Demonstrate and apply knowledge of human behavior in all design projects.
03.12 Verify appropriate allocations of space according to programmatic needs.
03.13 Sketch preliminary layouts.
03.14 Identify the differences between public and private space, form, and usage.

04.0 Select and arrange furniture, equipment, and accessories--The student should be able to accomplish the following:
04.01 Analyze criteria for the selection and arrangement of furnishings including furnishings to be used by persons with disabilities, the elderly, and/or children.
04.02 Develop a furniture arrangement and traffic plan.

04.03 Select bathroom and kitchen fixtures and tile types for an interior design plan for both residential and non-residential buildings or public space.
04.04 Select kitchen and bath cabinets for an interior design plan in an occupied space.
04.05 Select the different fabrics available and recognize characteristics such as durability, texture, comfort, and end use.
04.06 Identify precedents in the use of different materials and furnishings and their historical relevance.

05.0 Identify the appropriate use and function of furnishings and materials--The student should be able to accomplish the following:
05.01 Identify and analyze flooring materials and determine the advantages and disadvantages of each.
05.02 Analyze the characteristics of fibers and the construction of various types of floor coverings and interior fabrics.
05.03 Identify various ceiling treatments.
05.04 Identify and categorize types of wall coverings.
05.05 Identify and describe types and functions of windows.
05.06 Identify and describe different types of window coverings.
05.07 Estimate quantity needed for floor, window treatments, and wall coverings.
05.08 Consider maintenance requirements in specifying materials.

06.0 Identify, research, and specify design materials and resources--The student should be able to accomplish the following:
06.01 Identify lighting manufacturers.
06.02 Identify manufacturers of architectural treatments.
06.03 Identify manufacturers of accessories.
06.04 Demonstrate how to use the Internet when researching materials.
06.05 Identify recyclable resources for design materials.
06.06 Demonstrate an understanding of quality differences in design materials.
06.07 Identify and describe those aspects of interior materials and installation methods, which have potential to impact the health, safety, and welfare of residential and commercial clientele.
06.08 Identify and describe the role manufacturers' representatives, contractors, and other resource specialists play in assisting the designer and client/s in the appropriate selection, design, specification, and installation of materials and finishes for design projects.
06.09 Identify and describe the role testing standards, agencies, and ratings have on the designer's selection and specifications of materials and products to protect the health, safety, and welfare of the client and the public.

07.0 Research and specify appropriate interior lighting--The student should be able to accomplish the following:
07.01 Identify lighting requirements in terms of specific purposes for which lighting is required.
07.02 Relate lighting styles and fixtures to interior and exterior design.
07.03 Identify appropriate lighting fixtures to perform efficiently and effectively in residential and contract interior design projects.
07.04 Identify and describe human response to light contrast and glare.
07.05 Identify and describe the factors of contrast and diffusion as they affect interior space.
07.06 Describe or illustrate the positive and negative impact of daylight on interiors.

07.07 Describe various means of controlling daylight impact on interiors.
07.08 Identify and describe terms and processes by which various levels of illumination are related and measured.
07.09 Identify and describe or illustrate lighting needs for the aging.
07.10 Identify special purpose commercial lighting (office, retail, or hospitality) in an interior project.
07.11 Identify and define the characteristics and sources of manmade light.
07.12 Identify and describe the color characteristics of artificial lighting.
07.13 Identify and describe the economic issues of lighting.
07.14 Identify, describe, and apply knowledge of both architectural and portable lighting.
07.15 Apply knowledge of appropriate fixture placement and location in interior design projects.
07.16 Identify, describe, and apply appropriate placement and selection of light switches.
07.17 Identify and describe codes and regulations as they apply to health, safety, and welfare requirements in interior design.

08.0 Identify interior methods and systems in building construction--The student should be able to accomplish the following:
08.01 Identify methods and techniques of construction.
08.02 Read basic mechanical plans.
08.03 Describe the advantages of applying green design considerations to construction decisions.
08.04 Identify the different materials and assemblies employed in the construction of partitions, walls, and ceilings for residential and commercial application.
08.05 Identify the available types of millwork woods and veneers.
08.06 Identify and describe the appropriate cuts in lumber and timber for construction or millwork application.
08.07 Identify and draw appropriate installation systems of wall paneling and acoustical ceilings.
08.08 Describe the uses and characteristics of available glazing and film for doors and windows for energy and security considerations in both residential and commercial application.
08.09 Identify and describe the function and appropriate specification of millwork finishes.

09.0 Identify building codes, regulations, and legislation relating to residential and non-residential spaces--The student should be able to accomplish the following:
09.01 Identify local, state, and national building codes as well as the UBC (Uniform Building Codes)
09.02 Identify legislation for barrier-free environment.
09.03 Identify regulations regarding all Health and Safety codes.
09.04 Cite labeling techniques that identify products that meet flammability standards required by fire code.
09.05 Identify the different requirements based on type of occupancy and type of construction.
09.06 Describe the material ratings and resistance of materials to fire.
09.07 Apply ADA requirements as they relate to the design of interior spaces.

10.0 Communicate design concepts through visual and oral presentation skills --The student should be able to accomplish the following:

- 10.01 Use drafting equipment and computer programs to present interior design concepts.
- 10.02 Demonstrate the use and care of graphics equipment.
- 10.03 Demonstrate neatness and accuracy.
- 10.04 Execute line work by hand and/or by CAD.
- 10.05 Illustrate size and scale in a drawing.
- 10.06 Demonstrate overlapping techniques.
- 10.07 Explain detail drawings.
- 10.08 Illustrate shade and shadow from natural light source.
- 10.09 Apply methods and techniques for three-dimensional illustrations.
- 10.10 Analyze perspective drawing.
- 10.11 Apply methods and techniques of a one-point perspective drawing.
- 10.12 Apply methods and techniques of a two-point perspective drawing.
- 10.13 Create, analyze, and evaluate presentation techniques as vehicles for graphic illustration.
- 10.14 Demonstrate layout techniques.
- 10.15 Apply design principles to layout.
- 10.16 Evaluate professional presentation of graphic illustration.
- 10.17 Use lettering techniques and computer skills for visual and oral presentations.
- 10.18 Use graphic presentation skills in compiling and reviewing a portfolio.

11.0 Demonstrate employability skills and identify job and career opportunities--The student should be able to accomplish the following:

- 11.01 Conduct a job search.
- 11.02 Secure information concerning a job.
- 11.03 Identify documents that may be required when applying for a job.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from an employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate acceptable employee health habits.
- 11.09 Demonstrate customer relations skills.
- 11.10 Evaluate sources of employment information.
- 11.11 Identify four-year schools and special interior design schools for further study.
- 11.12 Identify job and career opportunities in interior design business and industry.

12.0 Identify business organization and development procedures and/or systems for a professional practice--The student should be able to accomplish the following:

- 12.01 List interior design professional organizations.
- 12.02 Analyze business practices and procedures necessary in an interior design business.
- 12.03 Recognize legal and business terms used in the practice of interior design.
- 12.04 Describe the legal considerations and forms necessary to the practice of interior design.
- 12.05 Describe procedures used in current interior design work experience.
- 12.06 Identify considerations in selecting a location for a business.
- 12.07 Review a plan for the organizational structure of an interior design studio.
- 12.08 Identify principles of record keeping.

12.09 Prepare contracts.
12.10 Cite licensing requirements needed to operate a business.
12.11 Identify methods or techniques of supply procurement.
12.12 Describe the principles of pricing for profit.
12.13 Analyze profit margin.
12.14 Demonstrate an understanding of the code of ethics for professional designers as prepared by the professional organizations.
12.15 Demonstrate an understanding of licensing requirements.

13.0 Analyze historical, cultural, and societal influences on structures, interiors, and furnishings--The student should be able to accomplish the following:

13.01 Analyze characteristics of historic design in relation to the history of interiors.
13.02 Identify and describe the influence of ancient Roman and Greek architecture, furniture styles, and decorative arts on interiors of later civilizations.
13.03 Recognize architectural styles and interiors of the Middle Ages.
13.04 Identify and describe the influence of Italian Renaissance architecture, furniture, and decorative arts on interiors through to current times.
13.05 Describe the influences of Spanish and Islamic cultures on interior design.
13.06 Identify and describe architecture, interiors, furniture, and the decorative arts from the French Renaissance to the nineteenth century.
13.07 Recognize architecture, interiors, and furniture designed in England's historical and contemporary periods.
13.08 Compare Georgian architecture and interior design with the Restoration to the Middle Georgian period.
13.09 Describe the characteristics of Georgian architecture and interiors designed in America during the 18th century.
13.10 Describe the Queen Anne styles of interior design.
13.11 Describe English interior design of the Adam or Neoclassic period.
13.12 Recognize English interior design of the Regency period.
13.13 Recognize English interior design of the Victorian period.
13.14 Recognize Early American architecture and interior design up to the nineteenth century.
13.15 Describe the Eastern influences on interior design.
13.16 Describe sequences of historical influence on architecture and interior design.
13.17 Describe the arts and crafts movement in interior design.
13.18 Describe Art Nouveau as a movement in interior design.
13.19 Describe various movements in the evolution of contemporary architecture and interior design.
13.20 Describe the impact of the Bauhaus design philosophy.
13.21 Describe the impact of the International Style on architecture, interior design, and furnishings.
13.22 Analyze and compare contemporary architects, furniture designers, and styles.
13.23 Analyze and compare contemporary architects.
13.24 Describe the impact the Post Modern and Pluralistic architectural movements have had on the building environment, interior space, and furniture.
13.25 Apply knowledge and appropriate synthesis of the contemporary form with furnishings, finishes, and materials in design projects.

14.0 Analyze the concept of readapting and/or renovating existing structures--The student should be able to accomplish the following:

14.01 Summarize significant issues and fundamentals of restoration, preservation, and renovation.
14.02 Compare preservation, restoration, and renovation.
14.03 Analyze the issues of housing restoration.
14.04 Identify sources for researching historical period data.

15.0 Incorporate evaluation, space planning, layout, workflow, and design into a project--The student should be able to accomplish the following:

15.01 Develop a plan for a total concept for interior design and furnishings.
15.02 Apply design methods and techniques to a project in residential and nonresidential interior design.
15.03 Understand and apply the programming sequences in a design product.
15.04 Demonstrate an understanding of design development stages by completing a design project.
15.05 Demonstrate an understanding of the purpose and content of a post-occupancy evaluation.
15.06 Develop a schedule for installations.
15.07 Research catalog price lists and prepare order forms.
15.08 Develop and prepare a budget for a project.
15.09 Prepare specifications re: F, F, & E for a project.
15.10 Prepare finish schedules/plans.

16.0 Coordinate the interior with the exterior of a building/residence where appropriate--The student should be able to accomplish the following:

16.01 Describe the steps in selecting exterior modalities and options.
16.02 Evaluate factors of orientation on the site.
16.03 Select interior and exterior lighting.
16.04 Unify the interior and exterior themes.

17.0 Calculate the costs involved in a budget estimate of an interior project--The student should be able to accomplish the following:

17.01 Outline the costs of materials, furnishings, equipment, overhead, and services to be provided.
17.02 Demonstrate the different methods available to estimate the cost of a project.
17.03 Apply information to administrate the process effectively.

18.0 Learn the process of preparing a complete set of working construction drawings of a residential building manually and/or electronically--The student should be able to accomplish the following:

18.01 Organize a construction package according to content categories.
18.02 Coordinate documents from different parties involved in the process of compiling construction drawings.
18.03 Implement standard graphics and symbols.
18.04 Design and specify millwork and special features.

19.0 Identify the effects of sound on habitable spaces--The student should be able to accomplish the following:

19.01 Apply the basic principles, concepts, and qualities of sound as they affect human perception.
19.02 Evaluate and demonstrate an understanding of sound transmission and levels.

- 19.03 Apply the fundamentals of sound absorption to evaluate means that might be employed to control the acoustic quality of a space.
- 19.04 Consider issues of sound transmission and methods to tailor interior materials and components to specific uses of a space, allowing for appropriate speech privacy or transmission.
- 19.05 Determine the layout and surface treatment of walls, ceilings, and finishes, in addition to spatial organization, to achieve desired results in sound balance and comfort in an interior.

20.0 Identify egress requirements--The student should be able to accomplish the following:

- 20.01 Calculate occupant load and required number of exits.
- 20.02 Determine the appropriate exit sizes, travel distances, and location of exits within a room or corridor.
- 20.03 Choose appropriate door types for access and egress.
- 20.04 Locate stairways to meet fire-safety requirements.
- 20.05 Identify the differences between residential, commercial, and industrial access and egress requirements.

21.0 Design safe and universally accessible spaces–-The student should be able to accomplish the following:

- 21.01 Incorporate the use of ramps and automated systems designed to accommodate persons with disabilities.
- 21.02 Demonstrate an understanding of the anthropometrics and ergonomics of a disabled person to implement in the selection of fixtures, floor surfaces, and bathroom layouts.
- 21.03 Implement the principles of uniform design.

22.0 Prepare the basic agreement between designer and client, identifying services and responsibilities--The student should be able to accomplish the following:

- 22.01 Put together the basic elements of a contract.
- 22.02 Outline the scope of basic interior design services plus any additional services to be offered.
- 22.03 Indicate the owner’s responsibilities toward the designer.
- 22.04 Include all costs related to the execution of the project as well as fees to be charged.
- 22.05 Indicate designer’s responsibilities toward the client.
- 22.06 List the basic components for a letter of agreement.

23.0 Demonstrate a basic knowledge of computer skills-–The student should be able to accomplish the following:

- 23.01 Demonstrate proficiency in word processing and other applications.
- 23.02 Demonstrate proficiency in setting up and using an e-mail account.
- 23.03 Create and manage computer files.
- 23.04 Research sources on the Internet.

24.0 Identify, research and design sustainable interiors–The student should be able to accomplish the following:

- 24.01 Analyze the concept and terminology of green design/sustainable design.
- 24.02 Demonstrate proficiency in material usage.
- 24.03 Identify governing organizations associated with sustainable design.

24.04 Evaluate the cost of green/sustainable design vs. other methods both initially and long term.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Interior Design Technology Kitchen and Bath Specialization**
Career Cluster: **Arts, A/V Technology and Communication**

	CCC
CIP Number	0404050106
Program Type	College Credit Certificate (CCC)
Program Length	39 Credit Hours
CTSO	College DECA
SOC Codes	27-1025
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Interior Design Technology AS/AAS degree program (0404050100).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for initial employment as a kitchen designer, bath designer, kitchen sales person, bath sales person, drafting/design technician, customer service specialist, job estimator, expeditor, industry representative, CAD technician, or installer/project manager.

Completion of studies is the first step in the process of fulfilling requirements needed to sit for the Kitchen and Bath certification. A secondary purpose of the program is to provide supplemental or required training for persons previously or currently employed in the above listed occupations.

The curriculum of the program includes the following: the elements and principles of design; the study of the human environment; programming; the design process and evaluation of design; technical knowledge and skills; selection and specifying of materials, fixtures, and equipment; visual and oral communication; design history; business principles and practices; lighting; space planning; codes; universal design; and employability. Students are required to create and maintain a portfolio throughout this program.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

- Use of drafting equipment
- Creation of drawings using drafting tables and CAD or industry related programs
- Fixtures and equipment used in kitchen/bath design
- Development, maintenance, and use of interior source
- Library research, identification, and use of interior design source materials, i.e. Non-textile building materials, interior-finish materials, industry catalogs of fixtures and equipment
- Employment in the field may be considered a laboratory activity or internship.

Career and Technical Student Organization (CTSO)

College DECA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student’s IEP or 504 plan or postsecondary student’s accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Identify and apply elements and principles of basic design to interior spaces.
02.0 Describe the interrelationship between humans and their interior environments.
03.0 Plan for space utilization and development according to identified functions.
04.0 Select and arrange furniture, equipment, and accessories.
05.0 Identify the appropriate use and function of interior furnishings and materials.
06.0 Identify, research, and specify interior design materials and resources.

07.0 Research and specify appropriate interior lighting.
08.0 Identify interior methods and systems in building construction.
09.0 Identify building codes, regulations, and legislation relating to residential and non-residential spaces.
10.0 Communicate design concepts through visual and oral presentation skills.
11.0 Demonstrate employability skills and identify job and career opportunities.
12.0 Identify business organization and development procedures and/or systems for a professional practice.
13.0 Analyze historical, cultural, and societal influences on structures, interiors, and furnishings.
14.0 Analyze the concept of readapting and/or renovating existing structures.
15.0 Incorporate evaluation, space planning, layout, workflow, and design into a project.
16.0 Coordinate the interior with the exterior of a building/residence where appropriate.
17.0 Calculate the costs involved in a budget estimate of an interior project.
18.0 Learn the process of preparing a complete set of working construction drawings of a residential building, manually and/or electronically.
19.0 Identify the effects of sound on habitable spaces.
20.0 Identify egress requirements.
21.0 Design safe and universally accessible spaces.
22.0 Prepare the basic agreement between the designer and the client, identifying services and responsibilities.
23.0 Demonstrate a basic knowledge of computer skills.
25.0 Recognize the concepts of sustainable design.
26.0 Participate in an internship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Interior Design Technology Kitchen and Bath Specialization**
CIP Number: **0404050106**
Program Length: **39 Credit Hours**
SOC Code(s): **27-1025**

01.0 Identify and apply elements and principles of basic design to interior spaces--The student should be able to accomplish the following:

01.01 Evaluate aspects of color schemes in relation to interior design.
01.02 Describe the color wheel.
01.03 Explain the psychological effects of color on space and human interaction.
01.04 Define and apply the principles of design.
01.05 Describe the way principles of design are used in interior design.
01.06 Define and demonstrate the aesthetic elements of design.
01.07 Describe the way elements of design are used in interior design.
01.08 Define and demonstrate figure, ground, and spatial relationships.
01.10 Describe and demonstrate the function of the visible spectrum and pigmentation as inherent properties of all design materials and their impact on color perception.
01.11 Describe and demonstrate knowledge of the three dimensions of color.
01.12 Identify common comprehensive color systems used by designers for the accurate description and specification of color.
01.13 Identify and apply knowledge of results and effects of color interaction in design.
01.14 Identify and apply the categories of material and surface texture to appropriate interior needs and function.
01.15 Identify and demonstrate the role of light on our perception of surface texture in design projects.
01.17 Identify, describe, and apply interior architectural and design elements not only to the function and use of the interior space, but also as an expressive factor in form and style.

02.0 Describe the interrelationship between humans and their interior environments--The student should be able to accomplish the following:

02.01 Identify personal and group needs that influence the use of each occupied space, including those of persons with special needs.
02.02 Identify family needs and activities that influence space requirements.
02.04 Identify ways that environmental characteristics may be controlled to provide a healthful physical environment and conserve energy.
02.07 Demonstrate an understanding of the Americans with Disabilities Act and how it affects the interior environment.
02.13 Identify and apply responses to the psychological and social needs of people using interiors as well as to their physical needs (i.e. territoriality, personalization, and group interaction).

03.0 Plan for space utilization and development according to identified functions—The student should be able to accomplish the following:

03.01 Identify and apply responses to the psychological and social needs of people using interiors as well as to their physical needs (i.e. territoriality, personalization, and group interaction).
03.02 Identify, describe, and demonstrate functional and aesthetic goals and objectives establishment, which direct the programming process.
03.03 Define and develop a client profile.
03.04 Identify, define, and apply known methods of collecting information and projected user requirements as fundamental to design project preparation.
03.05 Create and interpret a design matrix and other schematic processes.
03.07 Describe and demonstrate comprehension of spatial adjacency, utilization, circulation, light, and function.
03.08 Identify and apply the requirements of good traffic circulation.
03.09 Synthesize concepts of space utilization through sketching, schematic drawings, and models.
03.12 Verify appropriate allocations of space according to programmatic needs.
03.13 Sketch preliminary layouts.
03.14 Identify the differences between public and private space, form, and usage.

04.0 Select and arrange furniture, equipment, and accessories--The student should be able to accomplish the following:
04.01 Analyze criteria for the selection and arrangement of furnishings, including furnishings to be used by persons with disabilities, the elderly, and/or children.
04.02 Develop a furniture arrangement and traffic plan.
04.03 Select bathroom and kitchen fixtures and tile types for an interior design plan.
04.04 Select kitchen and bath cabinets for an interior design plan in an occupied space.
04.05 Select the different fabrics available and recognize characteristics such as durability, texture, comfort, and end use.
04.06 Identify precedents in the use of different materials and furnishings and their historical relevance.

05.0 Identify the appropriate use and function of interior furnishings and materials--The student should be able to accomplish the following:
05.01 Identify and analyze flooring materials and determine the advantages and disadvantages of each.
05.02 Analyze the characteristics of fibers and the construction of various types of floor coverings and interior fabrics.
05.03 Identify various ceiling treatments.
05.04 Identify and categorize types of wall coverings.
05.05 Identify and describe types and functions of windows.
05.06 Identify and describe different types of window coverings.
05.07 Consider maintenance requirements in specifying materials.

06.0 Identify, research, and specify interior design materials and resources--The student should be able to accomplish the following:
06.01 Identify lighting manufacturers.
06.02 Identify manufacturers of architectural treatments.
06.03 Identify manufacturers of accessories.
06.04 Demonstrate how to use the Internet when researching materials.
06.05 Identify recyclable resources for design materials.
06.06 Demonstrate an understanding of quality differences in design materials.

06.07 Identify and describe those aspects of interior materials and installation methods, which have potential to impact the health, safety, and welfare of residential and commercial clientele.
06.08 Identify and describe the role manufacturers' representatives, contractors, and other resource specialists play in assisting the designer and client/s in the appropriate selection, design, specification, and installation of materials and finishes for design projects.
06.09 Identify and describe the role testing standards, agencies, and ratings have on the designer's selection and specifications of materials and products to protect the health, safety, and welfare of the client and the public.

07.0 Research and specify appropriate interior lighting--The student should be able to accomplish the following:

07.01 Identify lighting requirements in terms of specific purposes for which lighting is required.
07.02 Relate lighting styles and fixtures to interior and exterior design.
07.03 Identify appropriate lighting fixtures to perform efficiently and effectively in residential and contract interior design projects.
07.04 Identify and describe human response to light contrast and efficiently.
07.05 Identify and describe the factors of contrast and diffusion as they affect interior space.
07.06 Describe or illustrate the positive and negative impact of daylight on interiors.
07.07 Describe various means of controlling daylight impact on interiors.
07.09 Identify and describe or illustrate lighting needs for the aging.
07.11 Identify and define the characteristics and sources of man-made light.
07.12 Identify and describe the color characteristics of artificial lighting.
07.13 Identify and describe the economic issues of lighting.
07.14 Identify, describe, and apply knowledge of both architectural and portable lighting.
07.15 Apply knowledge of appropriate fixture placement and location in interior design projects.
07.16 Identify, describe, and apply appropriate placement and selection of light switches.
07.17 Identify and describe codes and regulations as they apply to health, safety, and welfare requirements in interior design.

08.0 Identify interior methods and systems in building construction--The student should be able to accomplish the following:

08.01 Identify methods and techniques of construction.
08.02 Read basic mechanical plans.
08.03 Describe the advantages of applying green design considerations to construction decisions.
08.04 Identify the different materials and assemblies employed in the construction of partitions, walls, and ceilings for residential and commercial application.
08.05 Identify the available types of millwork woods and veneers.
08.06 Identify and describe the appropriate cuts in lumber and timber for construction or millwork application.
08.07 Identify and draw appropriate installation systems of wall paneling and acoustical ceilings.
08.09 Identify and describe the function and appropriate specification of millwork finishes.

09.0 Identify building codes, regulations, and legislation relating to residential and non-residential spaces--The student should be able to accomplish the following:

- 09.01 Identify local, state, and national building codes as well as the UBC (Uniform Building Codes)
- 09.02 Identify legislation for barrier-free environment.
- 09.03 Identify regulations regarding all Health and Safety codes.
- 09.04 Cite labeling techniques that identify products that meet flammability standards required by fire code.
- 09.06 Describe the material ratings and resistance of materials to fire.
- 09.07 Apply ADA requirements as they relate to the design of interior spaces.
- 09.08 Identify residential building codes.

10.0 Communicate design concepts through visual and oral presentation skills--The student should be able to accomplish the following:

- 10.01 Use drafting equipment and computer programs to present interior design concepts.
- 10.02 Demonstrate the use and care of graphics equipment.
- 10.03 Demonstrate neatness and accuracy.
- 10.04 Execute line work by hand and/or by CAD.
- 10.05 Illustrate size and scale in a drawing.
- 10.06 Demonstrate overlapping techniques.
- 10.07 Explain detail drawings.
- 10.08 Illustrate shade and shadow from natural light source.
- 10.09 Apply methods and techniques for three-dimensional illustrations.
- 10.10 Analyze perspective drawing.
- 10.11 Apply methods and techniques of a one-point perspective drawing.
- 10.12 Apply methods and techniques of a two-point perspective drawing.
- 10.13 Create, analyze, and evaluate presentation techniques as vehicles for graphic illustration.
- 10.14 Demonstrate layout techniques.
- 10.15 Apply design principles to layout.
- 10.16 Evaluate professional presentation of graphic illustration.
- 10.17 Use lettering techniques and computer skills for visual and oral presentations.
- 10.18 Use graphic presentation skills in compiling and reviewing a portfolio.

11.0 Demonstrate employability skills and identify job and career opportunities--The student should be able to accomplish the following:

- 11.01 Conduct a job search.
- 11.02 Secure information concerning a job.
- 11.03 Identify documents that may be required when applying for a job including the incorporation of a resume and cover letter in student portfolio.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from an employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate acceptable employee health habits.
- 11.09 Demonstrate customer relations skills.
- 11.10 Evaluate sources of employment information.
- 11.11 Identify four-year schools and special interior design schools for further study.

11.12 Identify job and career opportunities in interior design business and industry.

12.0 Identify business organization and development procedures and/or systems for a professional practice--The student should be able to accomplish the following:

12.01 List interior design professional organizations.
12.02 Analyze business practices and procedures necessary in an interior design business.
12.03 Recognize legal and business terms used in the practice of interior design.
12.04 Describe the legal considerations and forms necessary to the practice of interior design.
12.05 Describe procedures used in current interior design work experience.
12.06 Identify considerations in selecting a location for a business.
12.07 Review a plan for the organizational structure of an interior design studio.
12.08 Identify principles of record keeping.
12.09 Prepare contracts.
12.10 Cite licensing requirements needed to operate a business.
12.11 Identify methods or techniques of supply procurement.
12.12 Describe the principles of pricing for profit.
12.13 Analyze profit margin.
12.14 Demonstrate an understanding of the code of ethics for professional designers as prepared by the professional organizations.
12.15 Demonstrate an understanding of licensing requirements.
12.16 Identify business management and project management skills and adapt them to the kitchen/bath business.

13.0 Analyze historical, cultural, and societal influences on structures, interiors, and furnishings--The student should be able to accomplish the following:

13.01 Analyze characteristics of historic design in relation to the history of interiors.
13.25 Apply knowledge and appropriate synthesis of the contemporary form with furnishings, finishes, and materials in design projects.

14.0 Analyze the concept of readapting and/or renovating existing structures--The student should be able to accomplish the following:

14.01 Summarize significant issues and fundamentals of restoration, preservation, and renovation.
14.02 Compare preservation, restoration, and renovation.
14.03 Analyze the issues of housing restoration.
14.04 Identify sources for researching historical period data.

15.0 Incorporate evaluation, space planning, layout, workflow, and design into a project--The student should be able to accomplish the following:

15.01 Develop a plan for a total concept for interior design and furnishings.
15.02 Apply design methods and techniques to a project in residential and nonresidential interior design.
15.03 Understand and apply the programming sequences in a design product.
15.04 Demonstrate an understanding of design development stages by completing a design project.
15.05 Demonstrate an understanding of the purpose and content of a post-occupancy evaluation.
15.06 Develop a schedule for installations.
15.07 Research catalog price lists and prepare order forms.

15.08 Develop and prepare a budget for a project.
15.09 Prepare specifications re: F, F, & E for a project.
15.10 Prepare finish schedules/plans.

16.0 Coordinate the interior with the exterior of a building/residence where appropriate--The student should be able to accomplish the following:
16.01 Describe the steps in selecting exterior modalities and options.
16.03 Select interior and exterior lighting.
16.04 Unify the interior and exterior themes.

17.0 Calculate the costs involved in a budget estimate of an interior project--The student should be able to accomplish the following:
17.01 Outline the costs of materials, furnishings, equipment, overhead, and services to be provided.
17.02 Demonstrate the different methods available to estimate the cost of a project.
17.03 Apply information to administrate the process effectively.

18.0 Learn the process of preparing a complete set of working construction drawings of a residential building manually and/or electronically--The student should be able to accomplish the following:
18.01 Organize a construction package according to content categories.
18.02 Coordinate documents from different parties involved in the process of compiling construction drawings.
18.03 Implement standard graphics and symbols.
18.04 Design and specify millwork and special features.

19.0 Identify the effects of sound on habitable spaces--The student should be able to accomplish the following:
19.01 Apply the basic principles, concepts, and qualities of sound as they affect human perception.
19.02 Evaluate and demonstrate an understanding of sound transmission and levels.
19.03 Apply the fundamentals of sound absorption to evaluate means that might be employed to control the acoustic quality of a space.
19.05 Determine the layout and surface treatment of walls, ceilings, and finishes, in addition to spatial organization, to achieve desired results in sound balance and comfort in an interior.

20.0 Identify egress requirements--The student should be able to accomplish the following:
20.03 Choose appropriate door types for access and egress.
20.05 Identify the differences between residential access and egress requirements.

21.0 Design safe and universally accessible spaces–-The student should be able to accomplish the following:
21.01 Incorporate the use of ramps and automated systems designed to accommodate persons with disabilities.
21.02 Demonstrate an understanding of the anthropometrics and ergonomics of a disabled person to implement in the selection of fixtures, floor surfaces, and bathroom layouts.
21.03 Implement the principles of universal design.
21.04 Analyze the concept of green design.

22.0 Prepare the basic agreement between the designer and the client, identifying services and responsibilities--The student should be able to accomplish the following:
- 22.01 Put together the basic elements of a contract.
- 22.02 Outline the scope of basic interior design services plus any additional services to be offered.
- 22.03 Indicate the owner's responsibilities toward the designer.
- 22.04 Include all costs related to the execution of the project as well as fees to be charged.
- 22.05 Indicate designer's responsibilities toward the client.
- 22.06 List the basic components for a letter of agreement.

23.0 Demonstrate a basic knowledge of computer skills-–The student should be able to accomplish the following:
- 23.01 Demonstrate proficiency in word processing and other applications.
- 23.02 Demonstrate proficiency in setting up and using an e-mail account.
- 23.03 Create and manage computer files.
- 23.04 Research sources on the Internet.

25.0 Recognize the concepts of sustainable design – The student should be able to accomplish the following:
- 25.01 Define the terminology of sustainable design.
- 25.02 Identify appropriate materials of sustainable design.
- 25.03 Identify the costs and requirements of sustainable design.

26.0 Participate in an internship – The student should be able to accomplish the following:
- 26.01 Establish achievable goals related to internship.

Suggested Academic Requirements

Interior Design Technology – Kitchen and Bath Certificate

The Interior Design Technology – Kitchen And Bath Certificate Program includes a combination of theory and laboratory and community experiences for the development of competencies in kitchen and bath design.

Concepts of the program include the elements and principles of design; the study of the human environment; programming; the design process and evaluation of design; technical knowledge and skills; selection and specifying of materials, fixtures, and equipment; visual and oral communication; design history; business principles and practices; lighting; space planning; codes; universal design; and employability.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Film Production Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1610.010200	0610.010200
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-4032	27-4032
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as film production technicians, initial employment as camera operators, sound mixers, editors, editing assistants, set designers, key grips, gaffers, best boys, crane operators, lamp operators, generator operators, re-recording mixers, composers, music editors, Foley artists, production designers, art directors, set decorators, set leads, swings, on-set dressers, prop masters, on-set painters, props buyers, special effects coordinators, special effects assistants, art department coordinators, storyboard artists, visual effects supervisors, animators, technical directors, compositors, director of photography/cinematographers, first assistant/focus pullers, clapper/loaders, video/playback assistants, production manager/coordinators, camera PA/interns, steadicam operators, electronic assistant editors, production/ post-production supervisors, sound designers, sound editors, boom operators, and cable persons, or to provide supplemental training for persons previously or currently employed in these occupations. The content should include, but not be limited to, instruction that prepares individuals to function as members of a technical team within the framework of an organized film/video production. Instruction includes: production analysis, interpretation, purchasing/renting, scheduling and the application of production skills to solving unique shooting problems.

Also included are skills relating to professionalism, employability, communication and management. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Film Production industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of 64 credit hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Film Production Fundamentals (0610.010203) - 24 Credit Hours
Motion Picture Production (0610.010204) - 16 Credit Hours
Motion Picture Post-Production (0610.010205) - 16 Credit Hours
Motion Picture Production Mangagement (0610.010206) - 16 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Design and supervise the construction and installation of theatrical scenery to the specifications required in a scene for a film or video production.
02.0 Formulate strategies for audio recording and playback for film/video productions.
03.0 Synchronize dailies.
04.0 Supervise the hanging, focusing and circuiting of stage lights to the specifications required in lighting designs.
05.0 Function as part of a team on film/video productions.
06.0 Analyze and implement tasks for gripping.
07.0 Interpret and implement the audio requirements for film production.
08.0 Analyze and execute tasks for camera.
09.0 Analyze and execute tasks for film/video editing.
10.0 Analyze and execute for film lighting.
11.0 Demonstrate employability skills.
12.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Film Production Technology**
CIP Numbers:	**0610010200 AAS** **1610010200 AS**
Program Length:	**64 Credit Hours**
SOC Code(s):	**27-4032**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Design and supervise the construction and installation of theatrical scenery to the specifications required in a scene for a film or video production--The student will be able to:
  01.01 Design and draft scenic plans to scale.
  01.02 Interpret scenic plans for the appropriate use of materials and hardware for scenic construction.
  01.03 Formulate design strategies for the construction of common flat scenery.
  01.04 Formulate design strategies for the construction of three-dimensional scenery.
  01.05 Translate scene design needs into application techniques used in painting scenery.
  01.06 Create special effects scenery.
  01.07 Schedule and organize transportation of scenery to remote locations.
  01.08 Supervise scene shop activities.

02.0 Formulate strategies for audio recording and playback for film/video productions--The student will be able to:
  02.01 Demonstrate use of microphones, recorders, speakers, mixers, boom poles, and other recording and playback equipment.
  02.02 Demonstrate basic knowledge of acoustics.
  02.03 Evaluate recording needs.
  02.04 Evaluate technical resources as appropriate to given spaces.
  02.05 Configure and operate sound recording and playback systems to meet performance needs.
  02.06 Analyze various audio qualities to achieve proper sound mix on an audio mixer.
  02.07 Perform transactions with audio suppliers.
  02.08 Design a plot for proper microphone and speaker placement.

03.0 Synchronize dailies--The student will be able to:
  03.01 Transfer location sound from location recording format to display format.
  03.02 Synchronize sound element to picture element.
  03.03 Demonstrate basic sound editing skills (manually or electronically).

04.0 Supervise the hanging, focusing and circuiting of stage lights to the specifications required in lighting designs--The student will be able to:
  04.01 Demonstrate fundamental electrical skills (i.e. switches, circuits, Ohm's law).
  04.02 Demonstrate understanding of quality, physics, and color temperature of light.

04.03 Demonstrate understanding of lighting styles and techniques.
04.04 Demonstrate safe work habits.
04.05 Design a standard lighting plot.
04.06 Analyze and document lighting, electrical, and crew requirements for production.
04.07 Supervise hanging, circuiting and focusing lights for a production.
04.08 Manage lighting area operations.
04.09 Appraise maintenance needs for lighting equipment.
04.10 Design special-effects lighting.
04.11 Design and implement a power distribution system for film lighting equipment.

05.0 Function as part of a team on film/video productions--The student will be able to:
05.01 Differentiate the working relationships that exist between the various participants involved in the film making process.
05.02 Perform as a member of a technical team within the framework of an organized theater/film production.
05.03 Adapt learned skills and generate new approaches in order to solve unique production problems.
05.04 Demonstrate the proper use of standard film making forms.
05.05 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make up and editing departments.
05.06 Compare the techniques used in film and video production.
05.07 Manage resources and personnel in order to meet production deadlines.
05.08 Analyze job needs and perform transactions with rental houses and suppliers.
05.09 Apply accepted principles of film technology to production situation(s).
05.10 Interpret a film script and storyboard for their production requirements.
05.11 Develop appropriate industry contacts.
05.12 Formulate and implement a production plan in the areas of syncsound, camera, grip, electrical, sound, art direction, post-production, special effects, wardrobe, makeup, assistant direction, casting, script supervision and production management.

06.0 Analyze and implement tasks for gripping--The student will be able to:
06.01 Formulate strategies to properly utilize grip equipment during film/video production.
06.02 Translate script needs into creative uses of dollies, cranes and other camera mounts as required for film and video production.
06.03 Originate solutions to unique shooting problems.
06.04 Organize production routines.
06.05 Analyze a script for its technical requirements.
06.06 Work as a member of a film production team.
06.07 Develop appropriate industry contacts.
06.08 Demonstrate safe work habits.
06.09 Analyze production requirements to determine grip equipment needs.
06.10 Create required effects for lighting set-ups.
06.11 Demonstrate proper and safe use of equipment.
06.12 Appraise maintenance needs for gripping equipment (dollies, cranes, etc.).

07.0 Interpret and implement the audio requirements for film production--The student will be able to:
07.01 Formulate sound design for required sound effects and dialogue replacement to complete motion picture soundtrack.

07.02 Augment picture soundtrack with pre-recorded score from various sources.
07.03 Record dialogue replacement lines.
07.04 Record live sound effects.
07.05 Edit and synchronize pre-recorded sound effects from pre-recorded source in synch to picture.
07.06 Evaluate and edit production dialogue track.
07.07 Mix multiple tracks of dialogue, sound effects, and music into finished soundtrack according to industry quality standards.
07.08 Playback/synchronize finished soundtrack to finished picture track.

08.0 Analyze and execute tasks for the area of camera--The student will be able to:
08.01 Demonstrate knowledge of mechanics and parts of a camera (shutter, f/stops, lenses, etc.).
08.02 Demonstrate understanding of film stocks and lab processing.
08.03 Analyze the aesthetic needs of a shot and accomplish them by using standard industry camera equipment.
08.04 Interpret shooting activities required for appropriate camera department documentation.
08.05 Organize the proper care and handling of camera and camera support equipment.
08.06 Analyze the script for camera lens and shot requirements.
08.07 Organize production routines for film camera operation.
08.08 Demonstrate understanding of different responsibilities within the camera department.
08.09 Develop appropriate industry contacts.
08.10 Analyze production requirements to determine camera equipment needs.
08.11 Demonstrate knowledge of camera blocking and screen direction.

09.0 Analyze and execute tasks for the area of film/video editing--The student will be able to:
09.01 Interpret various production documentation related to editing script notes, camera notes, sound reports, lined script, continuity reports, etc.).
09.02 Demonstrate understanding of picture and sound editing techniques using traditional film editing equipment.
09.03 Demonstrate understanding of picture and sound editing techniques using nonlinear video editing systems.
09.04 Convert electronic editing list into material ready for a negative cutter.
09.05 Prepare electronic materials for further laboratory optical or visual effects.
09.06 Demonstrate understanding of organizing, archiving and cataloguing film and tape media.

10.0 Analyze and execute tasks for film lighting--The student will be able to:
10.01 Formulate strategies to utilize standard film lighting equipment to production specifications.
10.02 Plan and implement a power distribution system for film lighting equipment.
10.03 Organize production routines necessary for the lighting department.
10.04 Work as a member of a film production team.
10.05 Create a safe working environment.
10.06 Develop appropriate industry contacts.
10.07 Analyze production requirements to determine lighting equipment needs.
10.08 Create required lighting effects for film shooting.

11.0 Demonstrate employability skills--The student will be able to:
  11.01 Conduct a job search.
  11.02 Secure information about a job.
  11.03 Identify documents that may be required when applying for a job.
  11.04 Complete a job application form correctly.
  11.05 Demonstrate competence in job interview techniques.
  11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
  11.07 Identify acceptable work habits.
  11.08 Demonstrate knowledge of how to make job changes appropriately.
  11.09 Demonstrate acceptable employee health habits.
  11.10 Demonstrate knowledge of the "Federal Right-To-Know Law" as recorded in Federal Statutes 29 CFR-1910,1200.

12.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
  12.01 Define entrepreneurship.
  12.02 Describe the importance of entrepreneurship to the American economy.
  12.03 List the advantages and disadvantages of business ownership.
  12.04 Identify the risks involved in ownership of a business.
  12.05 Identify the necessary personal characteristics of a successful entrepreneur.
  12.06 Identify the business skills needed to operate a small business efficiently and effectively.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1610.010202	0610.010202
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-4011	27-4011
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for initial employment as digital media/multimedia programmer, digital media/multimedia project manager, web designer/web developer/web production artist, audio visual technician/audio technician, lighting technician, graphic animator, graphic designer, videographer/editor, video engineer, digital media/multimedia producer, technical director, instructional designer or interface designer, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to, the learning of management skills permitting the graduate to oversee the operation of institutional and industrial multiple media operations. Instruction includes: use of multimedia hardware and software, production analysis, the design and production of digital media/multimedia projects, digital media/multimedia management and the application of production skills to solving the problems relating to the integration of multiple media. Also included are skills relating to professionalism, employability, communication, and management.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Digital Media/Multimedia industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of 64 credit hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Digital Media/Multimedia Authoring (0610.010209) - 12 Credit Hours
Digital Media/Multimedia Instructional Technology (0610.010211) - 15 Credit Hours
Digital Media/Multimedia Production (0610.010207) - 15 Credit Hours
Digital Media/Multimedia Video Production (0610.010210) - 12 Credit Hours
Digital Media/Multimedia Presentation (0610.010219) - 17 Credit Hours
Digital Media/Multimedia Web Production (0610.010208) - 15 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Use industry standard digital media/multimedia hardware and software.
02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies.
03.0 Design and generate still imagery/Graphics.
04.0 Design and generate video and/or animations in a multimedia project.
05.0 Design and execute audio technology for a digital media/multimedia project.
06.0 Use computer applications for digital media/multimedia projects.
07.0 Produce digital media/multimedia projects.
08.0 Demonstrate appropriate communication skills.
09.0 Demonstrate appropriate math skills.
10.0 Demonstrate employability skills.
11.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Media/Multimedia Technology**
CIP Numbers: **0610010202 AAS**
1610010202 AS
Program Length: **64 Credit Hours**
SOC Code(s): **27-4011**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Use industry standard digital media/ multimedia hardware and software--The student will be able to:
- 01.01 Demonstrate the proper care and handling of equipment used in digital media/multimedia.
- 01.02 Perform pre and post production routines with digital media/multimedia hardware and software..
- 01.03 Analyze equipment performance to meet industry standards.

02.0 Create projects and presentations utilizing industry standard a variety of digital media/multimedia technologies--The student will be able to:
- 02.01 Analyze the strengths and weaknesses of presentational media.
- 02.02 Assess Digital Media Technology to determine production resources.
- 02.03 Utilize production techniques to create production outcomes.
- 02.04 Adapt learned skills and generate new approaches in order to solve unique production problems.

03.0 Design and generate still imagery/Graphics--The student will be able to:
- 03.01 Capture, manipulate and apply a still imagery/graphics in a digital media/multimedia project.
- 03.02 Differentiate and optimize still image formats.
- 03.03 Apply elements of design, principles of composition and qualities of light to still images/graphics in a digital media/multimedia project.
- 03.04 Understand the properties of light and how to measure its intensity and color.
- 03.05 Integrate the use of photographic special effects for a digital media/multimedia production.
- 03.06 Evaluate photographic quality using appropriate application.

04.0 Design and generate video and/or animations--The student will be able to:
- 04.01 Capture, manipulate and apply a video and/or animation image in a digital media/multimedia project.
- 04.02 Differentiate and optimize video and/or animation formats.
- 04.03 Apply elements of design, principles of composition and qualities of light to video and/or animation in a digital media/multimedia project.
- 04.04 Integrate the use of video special effects into digital media/multimedia project.
- 04.05 Evaluate moving image quality using appropriate application standards.
- 04.06 Shoot and edit video or create animation to production specifications

05.0 Design and execute audio technology for a digital media/multimedia project--The student will be able to:
  05.01 Capture, manipulate and apply audio and sound in a digital media/multimedia project.
  05.02 Differentiate and optimize formats for audio and sound.
  05.03 Evaluate production needs for microphone applications.
  05.04 Demonstrate proficiency with a multi-channel audio mixer.
  05.05 Generate strategies for electronic editing.
  05.06 Generate strategies for multi-track recording to industry standards.
  05.07 Interpret the applications of copyright laws as they apply to prerecorded materials.

06.0 Use computer applications for digital media/multimedia projects--The student will be able to:
  06.01 Demonstrate a basic proficiency with digital media/multimedia software packages.
  06.02 Design and produce digital media/multimedia content.
  06.03 Test, edit and de-bug digital media/multimedia content.
  06.04 Present digital media/multimedia content.

07.0 Produce digital media/multimedia projects--The student will be able to:
  07.01 Assess needs of the end user.
  07.02 Analyze resources available.
  07.03 Select and apply appropriate media.
  07.04 Create and write a script appropriate to the media selected.
  07.05 Create and prepare a storyboard appropriate to the media selected.
  07.06 Design navigational structure for interactive environments.
  07.07 Organize resources and personnel to implement production.
  07.08 Synthesize component elements of available digital media/multimedia technologies into a unified project.
  07.09 Appraise the quality and end user application of finished project.

08.0 Demonstrate appropriate communication skills--The student will be able to:
  08.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
  08.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
  08.03 Read and follow written and oral instructions.
  08.04 Answer and ask questions coherently and concisely.
  08.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
  08.06 Demonstrate appropriate communication skills.

09.0 Demonstrate appropriate math skills--The student will be able to:
  09.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
  09.02 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
  09.03 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.

10.0 Demonstrate employability skills--The student will be able to:
- 10.01 Create and write a résumé and cover letter.
- 10.02 Prepare and develop a portfolio, to be presented in appropriate format for medium..
- 10.03 Identify acceptable work habits.
- 10.04 Demonstrate competence in job interview techniques.
- 10.05 Formulate strategy for job search, employment and career after graduation..
- 10.06 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.

11.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
- 11.01 Define entrepreneurship.
- 11.02 Describe the importance of entrepreneurship to the American economy.
- 11.03 List the advantages and disadvantages of business ownership.
- 11.04 Identify the risks involved in ownership of a business.
- 11.05 Identify the necessary personal characteristics of a successful entrepreneur.
- 11.06 Identify the business skills needed to operate a small business efficiently and effectively.
- 11.07 Prepare a project budget reflecting revenue, cost, overhead and operating expenses.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Film Production Fundamentals**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010203
Program Type	College Credit Certificate (CCC)
Program Length	24 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

To prepare students for employment as assistant camera operator, set decorator, prop master, assistant editor, boom operator, audio utility, electrician and grip, or to provide supplemental training for persons previously or currently employed in these occupations. The content should include, but not be limited to, instruction that prepares students to function as part of a team on film/video productions.

This certificate program is part of the Film Production Technology AS/AAS degree program (0610.010200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Production activities are an integral part of this program and provide practical application and instruction in the areas of camera, lighting, sound, set construction, gripping and editing. In addition students will be exposed to other related skill areas such as, but not limited to, production management, special effects, script supervision, casting, make up, wardrobe and assistant directing.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

05.0 Function as part of a team on film/video productions.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Film Production Fundamentals**
CIP Number:	**0610.010203**
Program Length:	**24 Credits Hours**
SOC Code(s):	**27-4099**

This certificate program is part of the Film Production Technology AS/AAS degree program (0610010200). At the completion of this program, the student will be able to:

05.0 Function as part of a team on film/video productions—The student will be able to:
  05.01 Differentiate the working relationships that exist between the various participants involved in the film making process.
  05.02 Perform as a member of a technical team within the framework of an organized theater/film production.
  05.03 Adapt learned skills and generate new approaches in order to solve unique production problems.
  05.04 Demonstrate the proper use of standard film making forms.
  05.05 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make up and editing departments.
  05.06 Compare the techniques used in film and video production.
  05.07 Manage resources and personnel in order to meet production deadlines.
  05.08 Analyze job needs and perform transactions with rental houses and suppliers.
  05.09 Apply accepted principles of film technology to production situation(s).
  05.10 Interpret a film script and storyboard for their production requirements.
  05.11 Develop appropriate industry contacts.
  05.12 Formulate and implement a production plan in the areas of syncsound, camera, grip, electrical, sound, art direction, post-production, special effects, wardrobe, makeup, assistant direction, casting, script supervision and production management.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Motion Picture Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010204
Program Type	College Credit Certificate (CCC)
Program Length	16 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for employment as production assistant, lighting assistant, gripping assistant, audio assistant, camera assistant, or to provide supplemental training for persons previously or currently employed in these occupations. The content should include, but not be limited to, instruction that prepares individuals to function as members of a technical team within the framework of an organized film/video production. Instruction includes: scenery design, audio recording and playback, stage lighting, gripping, camera, and lighting.

This certificate program is part of the Film Production Technology AS/AAS degree program (0610010200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Production activities are an integral part of this program and provide practical application and instruction in the areas of camera, lighting, sound, set construction, gripping and editing. In addition students will be exposed to other related skill areas such as, but not limited to, production management, special effects, script supervision, casting, make up, wardrobe and assistant directing.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Formulate strategies for audio recording and playback for film/video productions.
03.0 Synchronize dailies.
04.0 Supervise the hanging, focusing and circuiting of stage lights to the specifications required in lighting designs.
05.0 Function as part of a team on film/video productions.
06.0 Analyze and implement tasks for gripping.
07.0 Interpret and implement the audio requirements for film production.
08.0 Analyze and execute tasks for camera.
09.0 Analyze and execute tasks for film/video editing.
10.0 Analyze and execute for film lighting.
11.0 Demonstrate employability skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Motion Picture Production**
CIP Number: **0610.010204**
Program Length: **16 Credit Hours**
SOC Code(s): **27-4099**

This certificate program is part of the Film Production Technology AS/AAS degree program (0610010200). At the completion of this program, the student will be able to:

02.0 Formulate strategies for audio recording and playback for film/video productions--The student will be able to:
- 02.01 Demonstrate use of microphones, recorders, speakers, mixers, boom poles, and other recording and playback equipment.
- 02.02 Demonstrate basic knowledge of acoustics.
- 02.03 Evaluate recording needs.
- 02.04 Evaluate technical resources as appropriate to given spaces.
- 02.05 Configure and operate sound recording and playback systems to meet performance needs.
- 02.06 Analyze various audio qualities to achieve proper sound mix on an audio mixer.
- 02.07 Design a plot for proper microphone and speaker placement.

03.0 Synchronize dailies--The student will be able to:
- 03.01 Transfer location sound from location recording format to display format.
- 03.02 Synchronize sound element to picture element.
- 03.03 Demonstrate basic sound editing skills (manually or electronically).

04.0 Supervise the hanging, focusing and circuiting of stage lights to the specifications required in lighting designs--The student will be able to:
- 04.01 Demonstrate fundamental electrical skills (i.e. switches, circuits, Ohm’s law).
- 04.02 Demonstrate understanding of quality, physics, and color temperature of light.
- 04.03 Demonstrate understanding of lighting styles and techniques.
- 04.04 Demonstrate safe work habits.
- 04.05 Design a standard lighting plot.
- 04.06 Analyze and document lighting, electrical, and crew requirements for production.
- 04.07 Supervise hanging, circuiting and focusing lights for a production.
- 04.08 Manage lighting area operations.

05.0 Function as part of a team on film/video productions--The student will be able to:
- 05.01 Differentiate the working relationships that exist between the various participants involved in the film making process.
- 05.02 Perform as a member of a technical team within the framework of an organized theater/film production.
- 05.03 Adapt learned skills and generate new approaches in order to solve unique production problems.
- 05.04 Demonstrate the proper use of standard film making forms.
- 05.05 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make up and diting departments.
- 05.06 Compare the techniques used in film and video production.

05.07 Manage resources and personnel in order to meet production deadlines.
05.08 Analyze job needs and perform transactions with rental houses and suppliers.
05.09 Apply accepted principles of film technology to production situation(s).
05.10 Interpret a film script and storyboard for their production requirements.
05.11 Develop appropriate industry contacts.
05.12 Formulate and implement a production plan in the areas of syncsound, camera, grip, electrical, sound, art direction, post-production, special effects, wardrobe, makeup, assistant direction, casting, script supervision and production management.

06.0 Analyze and implement tasks for gripping--The student will be able to:

06.01 Formulate strategies to properly utilize grip equipment during film/video production.
06.02 Translate script needs into creative uses of dollies, cranes and other camera mounts as required for film and video production.
06.03 Originate solutions to unique shooting problems.
06.04 Organize production routines.
06.05 Analyze a script for its technical requirements.
06.06 Work as a member of a film production team.
06.07 Develop appropriate industry contacts.
06.08 Demonstrate safe work habits.
06.09 Analyze production requirements to determine grip equipment needs.
06.10 Create required effects for lighting set-ups.
06.11 Demonstrate proper and safe use of equipment.
06.12 Appraise maintenance needs for gripping equipment (dollies, cranes, etc.).

07.0 Interpret and implement the audio requirements for film production--The student will be able to:

07.01 Formulate sound design for required sound effects and dialogue replacement to complete motion picture soundtrack.
07.02 Augment picture soundtrack with pre-recorded score from various sources.
07.03 Record dialogue replacement lines.
07.04 Record live sound effects.
07.05 Edit and synchronize pre-recorded sound effects from pre-recorded source in synch to picture.
07.06 Evaluate and edit production dialogue track.
07.07 Mix multiple tracks of dialogue, sound effects, and music into finished soundtrack according to industry quality standards.
07.08 Playback / synchronize finished soundtrack to finished picture track.

08.0 Analyze and execute tasks for the area of camera--The student will be able to:

08.01 Demonstrate knowledge of mechanics and parts of a camera (shutter, f/stops, lenses, etc.).
08.03 Analyze the aesthetic needs of a shot and accomplish them by using standard industry camera equipment.
08.04 Interpret shooting activities required for appropriate camera department documentation.
08.05 Organize the proper care and handling of camera and camera support equipment.
08.06 Analyze the script for camera lens and shot requirements.
08.07 Organize production routines for film camera operation.

08.08 Demonstrate understanding of different responsibilities within the camera department.
08.09 Develop appropriate industry contacts.
08.10 Analyze production requirements to determine camera equipment needs.
08.11 Demonstrate knowledge of camera blocking and screen direction.

09.0 Analyze and execute tasks for the area of film/video editing--The student will be able to:
09.01 Interpret various production documentation related to editing (script notes, camera notes, sound reports, lined script, continuity reports, etc.).
09.06 Demonstrate understanding of organizing, archiving and cataloguing film and tape media.

10.0 Analyze and execute tasks for film lighting--The student will be able to:
10.03 Organize production routines necessary for the lighting department.
10.04 Work as a member of a film production team.
10.05 Create a safe working environment.
10.06 Develop appropriate industry contacts.

11.0 Demonstrate employability skills--The student will be able to:
11.07 Identify acceptable work habits.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Motion Picture Post Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010205
Program Type	College Credit Certificate (CCC)
Program Length	16 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

To prepare students for employment as a post production assistant, or to provide supplemental training for persons previously or currently employed in these occupations. The content should include, but not be limited to, instruction that prepares individuals to function as members of a technical team within the framework of an organized film/video production. Instruction includes: synchronization of dailies, interpreting and implementing the audio requirements for a film production and employability skills.

This certificate program is part of the Film Production Technology AS/AAS degree program (0610.010200)

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

03.0 Synchronize dailies.
05.0 Function as part of a team on film/video productions.
07.0 Interpret and implement the audio requirements for film production.
11.0 Demonstrate employability skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Motion Picture Post Production**
CIP Number:	**0610.010205**
Program Length:	**16 Credit Hours**
SOC Code(s):	**27-4099**

This certificate program is part of the Film Production Technology At the completion of this program (0610.010200). At the completion of this program, the student will be able to:

03.0 Synchronize dailies--The student will be able to:
- 03.01 Transfer location sound from location recording format to display format.
- 03.02 Synchronize sound element to picture element.
- 03.03 Demonstrate basic sound editing skills (manually or electronically).

05.0 Function as part of a team on film/video productions—The student will be able to:
- 05.01 Differentiate the working relationships that exist between the various participants involved in the film making process.
- 05.02 Perform as a member of a technical team within the framework of an organized theater/film production.
- 05.03 Adapt learned skills and generate new approaches in order to solve unique production problems.
- 05.04 Demonstrate the proper use of standard film making forms.
- 05.05 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make up and editing departments.
- 05.06 Compare the techniques used in film and video production.
- 05.07 Manage resources and personnel in order to meet production deadlines.
- 05.08 Analyze job needs and perform transactions with rental houses and suppliers.
- 05.09 Apply accepted principles of film technology to production situation(s).
- 05.10 Interpret a film script and storyboard for their production requirements.
- 05.11 Develop appropriate industry contacts.

07.0 Interpret and implement the audio requirements for film production--The student will be able to:
- 07.01 Formulate sound design for required sound effects and dialogue replacement to complete motion picture soundtrack.
- 07.02 Augment picture soundtrack with pre-recorded score from various sources.
- 07.05 Edit and synchronize pre-recorded sound effects from pre-recorded source in synch to picture.
- 07.06 Evaluate and edit production dialogue track.

11.0 Demonstrate employability skills--The student will be able to:
- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required when applying for a job.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Motion Picture Production Management**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010206
Program Type	College Credit Certificate (CCC)
Program Length	16 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose
To prepare students for employment as a producer's assistant, production assistant, production manager, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to, instruction that prepares individuals to function as members of a technical team within the framework of an organized film/video production. Instruction includes: analysis and implementation of tasks for gripping, camera, lighting, and film/video editing

This certificate program is part of the Film Production Technology AS/AAS degree program (0610.010200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Production activities are an integral part of this program and provide practical application and instruction in the areas of camera, lighting, other related skill areas such as, but not limited to, production management, special effects, script supervision, casting, make up, wardrobe and assistant directing

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

05.0 Function as part of a team on film/video productions.
06.0 Analyze and implement tasks for gripping.
08.0 Analyze and execute tasks for camera.
09.0 Analyze and execute tasks for film/video editing.
10.0 Analyze and execute for film lighting.
11.0 Demonstrate employability skills.
12.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Motion Picture Production Management**
CIP Number:	**0610.010206**
Program Length:	**16 Hours**
SOC Code(s):	**27-4099**

This certificate program is part of the Film Production Technology AS/AAS degree program (0610.010200).

At the completion of this program, the student will be able to:

05.0 Function as part of a team on film/video productions--The student will be able to:
  05.04 Demonstrate the proper use of standard film making forms.
  05.05 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make up and editing departments.
  05.06 Compare the techniques used in film and video production.
  05.07 Manage resources and personnel in order to meet production deadlines.
  05.08 Analyze job needs and perform transactions with rental houses and suppliers.
  05.09 Apply accepted principles of film technology to production situation(s).
  05.10 Interpret a film script and storyboard for their production requirements.
  05.11 Develop appropriate industry contacts.
  05.12 Formulate and implement a production plan in the areas of syncsound, camera, grip, electrical, sound, art direction, post-production, special effects, wardrobe, makeup, assistant direction, casting, script supervision and production management.

06.0 Analyze and implement tasks for gripping--The student will be able to:
  06.02 Translate script needs into creative uses of dollies, cranes and their camera mounts as required for film and video production.
  06.03 Originate solutions to unique shooting problems.
  06.04 Organize production routines.
  06.05 Analyze a script for its technical requirements.
  06.06 Work as a member of a film production team.
  06.07 Develop appropriate industry contacts.
  06.08 Demonstrate safe work habits.
  06.09 Analyze production requirements to determine grip equipment needs.
  06.11 Demonstrate proper and safe use of equipment.

08.0 Analyze and execute tasks for the area of camera--The student will be able to:
  08.03 Analyze the aesthetic needs of a shot and accomplish them by using standard industry camera equipment.
  08.04 Interpret shooting activities required for appropriate camera department documentation.
  08.09 Develop appropriate industry contacts.
  08.10 Analyze production requirements to determine camera equipment needs.
  08.11 Demonstrate knowledge of camera blocking and screen direction.

09.0 Analyze and execute tasks for the area of film/video editing--The student will be able to:

09.03 Demonstrate understanding of picture and sound editing techniques using nonlinear video editing systems.
09.06 Demonstrate understanding of organizing, archiving and cataloguing film and tape media.

10.0 Analyze and execute tasks for film lighting--The student will be able to:
10.04 Work as a member of a film production team.
10.06 Develop appropriate industry contacts.
10.07 Analyze production requirements to determine lighting equipment needs.

11.0 Demonstrate employability skills--The student will be able to:
11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents that may be required when applying for a job.
11.04 Complete a job application form correctly.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.
11.10 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Federal 29 CFR-1910, 1200.

12.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
12.01 Define entrepreneurship.
12.02 Describe the importance of entrepreneurship to the American economy.
12.03 List the advantages and disadvantages of business ownership.
12.04 Identify the risks involved in ownership of a business.
12.05 Identify the necessary personal characteristics of a successful entrepreneur.
12.06 Identify the business skills needed to operate a small business efficiently and effectively.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010207
Program Type	College Credit Certificate (CCC)
Program Length	15 Credit Hours
CTSO	27-4099
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for initial employment as a digital media/multimedia production technician, digital media/multimedia developer, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to: use of multimedia hardware and software, and the design and production of digital media/multimedia projects, including manipulation of video and/or animations and audio.

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610.010202).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program with emphasis on the synthesis of disparate digital media/multimedia components into a unified presentation.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Use industry standard digital media/multimedia hardware and software.
02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies.
04.0 Design and generate video and/or animations in a multimedia project.
05.0 Design and execute audio technology for a digital media/multimedia project.
06.0 Use computer applications for digital media/multimedia projects.
07.0 Produce digital media/multimedia projects.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Media/Multimedia Production**
CIP Number: **0610010207**
Program Length: **15 Credits**
SOC Code(s): **27-4099**

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610.010202). At the completion of this program, the student will be able to:

01.0 Use industry standard digital media/ multimedia hardware and software--The student will be able to:
  01.03 Analyze equipment performance to meet industry standards.

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies--The student will be able to:
  02.01 Analyze the strengths and weaknesses of presentational media.
  02.02 Appraise production resources to achieve desired outcomes.
  02.03 Utilize production techniques to create the desired outcomes.
  02.04 Adapt learned skills and generate new approaches in order to solve unique production problems.

04.0 Design and generate video and/or animations--The student will be able to:
  04.01 Capture, manipulate and apply a video and/or animation image in a digital media/multimedia project.
  04.03 Apply elements of design, principles of composition and qualities of light to video and/or animation in a digital media/multimedia project.

05.0 Design and execute audio technology for a digital media/multimedia project--The student will be able to:
  05.01 Capture, manipulate and apply audio and sound in a digital media/multimedia project.

06.0 Use computer applications for digital media/multimedia projects--The student will be able to:
  06.01 Demonstrate a basic proficiency with digital media/multimedia software packages.
  06.02 Design and produce digital media/multimedia content.
  06.03 Test, edit and de-bug digital media/multimedia content.

07.0 Produce digital media/multimedia projects--The student will be able to:
  07.01 Assess needs of the end user.
  07.02 Analyze resources available.
  07.04 Create and write a script appropriate to the media selected.
  07.05 Create and prepare a storyboard appropriate to the media selected.
  07.08 Synthesize component elements of available digital media/multimedia technologies into a unified project.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Web Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010208
Program Type	College Credit Certificate (CCC)
Program Length	15 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for initial employment as web production assistant, web production artist, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to: analysis of end-user needs, use of digital media/multimedia computer applications, and the design and production of digital media/multimedia projects, including manipulation of video and/or animations and audio

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies.
04.0 Design and generate video and/or animations in a multimedia project.
05.0 Design and execute audio technology for a digital media/multimedia project.
06.0 Use computer applications for digital media/multimedia projects.
07.0 Produce digital media/multimedia projects.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Media/Multimedia Web Production**
CIP Number: **0610010208**
Program Length: **15 Credits**
SOC Code(s): **27-4099**

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202). At the completion of this program, the student will be able to:

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies--The student will be able to:
- 02.01 Analyze the strengths and weaknesses of presentational media.
- 02.02 Appraise production resources to achieve desired outcomes.

04.0 Design and generate video and/or animations--The student will be able to:
- 04.01 Capture, manipulate and apply a video and/or animation image in a digital media/multimedia project.
- 04.02 Differentiate and optimize video and/or animation formats.

05.0 Design and execute audio technology for a digital media/multimedia project--The student will be able to:
- 05.01 Capture, manipulate and apply audio and sound in a digital media/multimedia project.
- 05.02 Differentiate and optimize formats for audio and sound.

06.0 Use computer applications for digital media/multimedia projects--The student will be able to:
- 06.02 Design and produce digital media/multimedia content.
- 06.03 Test, edit and de-bug digital media/multimedia content.

07.0 Produce digital media/multimedia projects--The student will be able to:
- 07.01 Assess needs of the end user.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Authoring**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010209
Program Type	College Credit Certificate (CCC)
Program Length	12 Credits Hours
CTSO	27-4099
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical

Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies.
06.0 Use computer applications for digital media/multimedia projects.
07.0 Produce digital media/multimedia projects.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Media/Multimedia Authoring**
CIP Number: **0610010209**
Program Length: **12 Credit Hours**
SOC Code(s): **27-4099**

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202). At the completion of this program, the student will be able to:

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies--The student will be able to:
  02.04 Adapt learned skills and generate new approaches in order to solve unique production problems.

06.0 Use computer applications for digital media/multimedia projects--The student will be able to:
  06.01 Demonstrate a basic proficiency with digital media/multimedia software packages.
  06.02 Design and produce digital media/multimedia content.
  06.03 Test, edit and de-bug digital media/multimedia content.

07.0 Produce digital media/multimedia projects--The student will be able to:
  07.04 Create and write a script appropriate to the media selected.
  07.05 Create and prepare a storyboard appropriate to the media selected.
  07.06 Design navigational structure for non-linear environments.
  07.07 Organize resources and personnel to implement production.
  07.08 Synthesize component elements of available digital media/multimedia technologies into a unified project.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Video Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010210
Program Type	College Credit Certificate (CCC)
Program Length	12 Credit Hours
CTSO	27-4099
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for initial employment as a videographer, video editor, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to: design and generation of video and/or animations and the production of digital media/multimedia projects

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

04.0 Design and generate video and/or animations in a multimedia project.
07.0 Produce digital media/multimedia projects.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Digital Media/Multimedia Video Production**
CIP Number:	**0610010210**
Program Length:	**12 Credit Hours**
SOC Code(s):	**27-4099**

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202). At the completion of this program, the student will be able to:

04.0 Design and generate video and/or animations--The student will be able to:
  04.01 Capture, manipulate and apply a video and/or animation image in a digital media/multimedia project.
  04.02 Differentiate and optimize video and/or animation formats.
  04.03 Apply elements of design, principles of composition and qualities of light to video and/or animation in a digital media/multimedia project.
  04.04 Integrate the use of video special effects into digital media/multimedia presentations.
  04.05 Evaluate moving image quality using appropriate application standards.

07.0 Produce digital media/multimedia projects--The student will be able to:
  07.04 Create and write a script appropriate to the media selected.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Instructional Technology**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010211
Program Type	College Credit Certificate (CCC)
Program Length	15 Credit Hours
CTSO	27-4099
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for initial employment as an instructional developer, instructional media integrator, instructional media specialist, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to: the design and production of digital media/multimedia projects using computer applications, and demonstration of appropriate communication skills.

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies.
06.0 Use computer applications for digital media/multimedia projects.
07.0 Produce digital media/multimedia projects.
08.0 Demonstrate appropriate communication skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Digital Media/Multimedia Instructional Technology**
CIP Number:	**0610010211**
Program Length:	**15 Credit Hours**
SOC Code(s):	**27-4099**

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202). At the completion of this program, the student will be able to:

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies--The student will be able to:
- 02.01 Analyze the strengths and weaknesses of presentational media.

06.0 Use computer applications for digital media/multimedia projects--The student will be able to:
- 06.01 Demonstrate a basic proficiency with digital media/multimedia software packages.
- 06.02 Design and produce digital media/multimedia content.

07.0 Produce digital media/multimedia projects--The student will be able to:
- 07.01 Assess needs of the end user.
- 07.02 Analyze resources available.

08.0 Demonstrate appropriate communication skills--The student will be able to:
- 08.03 Read and follow written and oral instructions.
- 08.04 Answer and ask questions coherently and concisely.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Television and Media Production**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1610.010212	0610.010212
Program Type	College Credit	College Credit
Standard Length	64 Credits	64 Credits
CTSO	27-4099	27-4099
SOC Codes (all applicable)	SkillsUSA	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare students for employment as television and video production personnel. Job titles include independent video producer, camera operator, floor director, technical producer, videographer, video editor, location/studio sound operator, broadcast graphics designer and webcast producer/director.

The content includes, but is not limited to television, broadcast, video, design and internet media training. This program focuses on broad transferable skills and stresses understanding and demonstration of the following elements of the television video and internet/webcast industries: lighting, photography, design, camera operation, floor and television direction, post-production, editing and webcast production. Also included are skills relating to professionalism, employability, communication and management. Programs may include the following specialization areas: Broadcast Television, Video Production or Internet/Webcast Production.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Television Studio Production (1610.010213) - 12 Credit Hours
Digital Video Fundamentals (1610.010214) - 12 Credit Hours
Webcast Media (1610.010215) - 12 Credit Hours
Broadcast Production (1610.010216) - 24 Credit Hours
Video Editing and Post Production (1610.010217) - 24 Credit Hours
Webcast Technology (1610.010218) - 24 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate effective communication skills.
02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
04.0 Demonstrate knowledge of appropriate industry laws, regulations, trade terminology and ethical practices.
05.0 Develop a project proposal and script.
06.0 Generate a production schedule.
07.0 Plan a production set.
08.0 Acquire appropriate production resources.
09.0 Create appropriate lighting for location and/or set productions.
10.0 Operate a video camera.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources.
13.0 Operate control room equipment.
14.0 Organize and edit video resources.
15.0 Design and generate graphic elements.
16.0 Direct a TV/video production or webcast.
17.0 Plan, coordinate and manage a TV or Video based production.
18.0 Create a marketing and distribution plan.
19.0 Demonstrate appropriate math skills.
20.0 Demonstrate an appropriate understanding of basic science.
21.0 Demonstrate employability skills.
22.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Television and Media Production**
CIP Numbers: **0610.010212**
Program Length: **64 Credit Hours**
SOC Code(s): **27-4099**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Demonstrate effective communication skills--The student will be able to:
  01.01 Demonstrate presentation skills.
  01.02 Prepare written correspondence.
  01.03 Demonstrate effective oral communication skills.
  01.04 Read and interpret written and oral directions.

02.0 Demonstrate team skills--The student will be able to:
  02.01 Demonstrate management and leadership abilities.
  02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:
  03.01 Follow industry safety rules, regulations and policies.
  03.02 Demonstrate proper handling of hazardous materials.
  03.03 Demonstrate awareness of appropriate ergonomics.
  03.04 Demonstrate proper care of equipment.
  03.05 Demonstrate appropriate use of equipment.

04.0 Demonstrate knowledge of appropriate industry laws, regulations, terminology and ethical practices--The student will be able to:
  04.01 Define all Federal Communications Commission regulations pertaining to the broadcasting and various industry distribution methods.
  04.02 Define the laws and regulations pertaining to the ownership and control of media assets, license allocation, measurement and records, political broadcasts and lottery laws.
  04.03 Utilize trade terminology appropriately.
  04.04 Utilize trade abbreviations and acronyms as appropriate.
  04.05 Define the laws and practices underlying rights, releases and permits.
  04.06 Define the laws and practices underlying slander, libel, free speech and “truth in advertising” issues and Privacy Rights.
  04.07 Define the laws and practices underlying indecent programming, obscenity and censorship issues.
  04.08 Define the laws and practices underlying contract, labor issues, copyright and insurance/liability issues.

05.0 Develop a project proposal and script--The student will be able to:
  05.01 Identify a project goal.
  05.02 Create a project budget.

05.03 Write a production script.
05.04 Develop a story-board from a script.
05.05 Develop and or respond appropriately to RFP's

06.0 Generate a production schedule--The student will be able to:
06.01 Define the segment or program type.
06.02 Identify production resources needed.
06.03 Establish viable production time frame targets.
06.04 Formulate and develop a production budget.

07.0 Plan a production set--The student will be able to:
07.01 Define set requirements for program type.
07.02 Develop and supervise set assembly/contract work.
07.03 Define needed prop, costume and other resources.
07.04 Acquire appropriate locations for segment type.

08.0 Acquire appropriate production resources--The student will be able to:
08.01 Secure project funding sources.
08.02 Acquire rights, releases and permits.
08.03 Cast talent.
08.04 Define production equipment needs.
08.05 Define personnel needs for production crew positions.
08.06 Acquire other audio and video resources and assets for production.
08.07 Define the tasks for contract professionals.

09.0 Create appropriate lighting for location and/or set productions--The student will be able to:
09.01 Determine appropriate lighting needs for production settings.
09.02 Identify locations and studio lighting types, method of use and application.
09.03 Use lighting equipment according to industry safety standards.
09.04 Define light quality in terms of intensity, color, direction and characteristics.
09.05 Light a location set with ambient/available and supplemental lighting.
09.06 Use lighting for effect to control mood and impact in production settings.
09.07 Use studio lighting master control equipment.

10.0 Operate a video camera--The student will be able to:
10.01 Use current industry standard production video equipment.
10.02 Operate camera in studio and location (field) production environments.

11.0 Shoot studio and/or location footage--The student will be able to:
11.01 Plan a shot to obtain required action/footage.
11.02 Demonstrate appropriate shot sequences, transitions and post production (edit) effects.
11.03 Control camera movement to obtain required effects.
11.04 Control lens, focal length, aperture and exposure to obtain required effects.
11.05 Set up camera and recording equipment sequence.
11.06 Perform appropriate pre-production checks of equipment function.
11.07 Perform basic routine, preventative and repair maintenance on video equipment.
11.08 Define the various recording formats and media.
11.09 Define appropriate digital compression and signal (file) types.

12.0 Record, mix and edit audio resources--The student will be able to:
- 12.01 Identify and select microphones for production needs.
- 12.02 Determine optimal microphone placement.
- 12.03 Set up audio recording equipment.
- 12.04 Establish appropriate recording conditions.
- 12.05 Perform appropriate pre-production check of production equipment.
- 12.06 Set up audio mixing console and control equipment.
- 12.07 Acquire library and archive sound assets.
- 12.08 Perform sound edits and enhancements.
- 12.09 Perform sound dubs and overdubs.
- 12.10 Record location sound.
- 12.11 Record studio live sound.
- 12.12 Prepare recorded files for production requirements
- 12.13 Record voice-over and soundtrack.
- 12.14 Perform routine, preventative and basic repair maintenance on audio equipment.

13.0 Operate control room equipment--The student will be able to:
- 13.01 Define control room functions in a production.
- 13.02 Operate the audio console (mixer) in a production.
- 13.03 Operate vision control equipment.
- 13.04 Operate camera switching and traffic control equipment.
- 13.05 Operate routing switcher for production requirements .
- 13.06 Follow industry standards for broadcast audio/video signal and levels.
- 13.07 Maintain production values and continuity.
- 13.08 Operate (CCU) Camera Control Unit

14.0 Organize and edit video resources--The student will be able to:
- 14.01 Log and organize video resources.
- 14.02 Operate editing hardware and software.
- 14.03 Digitize video resources into post-production equipment and workflow.
- 14.04 Edit video for script and or production requirements
- 14.05 Maintain continuity and production values.
- 14.06 Mix audio and video resources for production requirements.
- 14.07 Apply color correction to video footage.
- 14.08 Transfer finished edit to appropriate media for streaming distribution or archiving.

15.0 Design and generate graphic elements--The student will be able to:
- 15.01 Determine the graphic requirements for a production.
- 15.02 Operate graphic production software.
- 15.03 Produce broadcast graphic elements for titling, credits and graphic transitions.
- 15.04 Determine the special effects need for a production.
- 15.05 Set up and operate character generator equipment and software.
- 15.06 Generate appropriate special effects for a production.
- 15.07 Demonstrate an understanding of graphic image types, file formats, and technical requirements for a production.
- 15.08 Use image editing software.
- 15.09 Edit graphics into the program or segment.
- 15.10 Demonstrate an ability to use type, color, composition and graphic elements for a specific production effect.

16.0 Direct TV/Video production or webcast--The student will be able to:

16.01 List and explain crew functions that come under the director's control.
16.02 Direct on-camera talent.
16.03 Direct crew during production.
16.04 Direct camera operation, lighting and sound recording functions.
16.05 Direct set, proper and craft services.
16.06 Oversee continuity and production values.

17.0 Plan, coordinate and manage a TV or video based production--The student will be able to:
17.01 Define the program/segment format and market.
17.02 Present a project proposal and script for approval.
17.03 Develop a production schedule.
17.04 Create a plan to acquire all needed production resources and talent.
17.05 Manage crew and staff during pre-planning and production.
17.06 Determine post-production requirements.
17.07 Coordinate post-production activities.
17.08 Conduct client approval reviews of project.
17.09 Direct final production values.
17.10 Archive and manage finished assets and originals.
17.11 Oversee broadcast/distribution to market.
17.12 Explain various techniques for program or segments promotion.
17.13 Explain the techniques and procedures of web hosts, portals, television broadcast and cable networks, syndication and public broadcasters.

18.0 Create a marketing and distribution plan--The student will be able to:
18.01 Identify potential markets.
18.02 Identify clients.
18.03 Prepare bids and proposals.
18.04 Determine distribution method and format.
18.05 Define distribution logistics and technical requirements.
18.06 Determine user interface for interactive elements.
18.07 Develop delivery schedule.
18.08 Manage duplication/replication and/or distribution activities.
18.09 Develop revenue and payment projections.

19.0 Demonstrate appropriate math skills--The student will be able to:
19.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
19.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
19.03 Add, subtract, multiply and divide using fractions, decimals and whole numbers.
19.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
19.05 Demonstrate an understanding of federal, state and local taxes and their computation.

20.0 Demonstrate appropriate understanding of basic science—The student will be able to:
20.01 Draw conclusions or make inferences from data.
20.02 Identify health related problems that may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.

20.03 Demonstrate an understanding of pressure measurement in terms of PSI, inches of mercury, and KPA.

21.0 Demonstrate employability skills--The student will be able to:
21.01 Create and write a resume and cover letter.
21.02 Prepare and develop a portfolio to be presented in appropriate format for medium
21.03 Conduct a job search.
21.04 Secure information about a job.
21.05 Identify documents that may be required when applying for a job interview.
21.06 Complete a job application form correctly.
21.07 Demonstrate competence in job interview techniques.
21.08 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
21.09 Identify acceptable work habits.
21.10 Demonstrate knowledge of how to make appropriate job changes.
21.11 Demonstrate acceptable employee health habits.
21.12 Demonstrate knowledge of the “Florida Right-To-Know Law” as recorded in Federal Statutes 29 CFR-1910, 1200.

22.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
22.01 Define entrepreneurship.
22.02 Describe the importance of entrepreneurship to the American economy.
22.03 List the advantages and disadvantages of business ownership.
22.04 Identify the risks involved in ownership of a business.
22.05 Identify the necessary personal characteristics of a successful entrepreneur.
22.06 Identify the business skills needed to operate a small business efficiently and effectively.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Television Studio Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010213
Program Type	College Credit Certificate (CCC)
Program Length	12 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4031
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student

Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
09.0 Create appropriate lighting for location and/or set productions.
10.0 Operate a video camera.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources.
13.0 Operate control room equipment.
14.0 Organize and edit video resources.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Television Studio Production**
CIP Number: **0610.010213**
Program Length: **12 Credit Hours**
SOC Code(s): **27-4031**

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212). At the completion of this program, the student will be able to:

02.0 Demonstrate team skills--The student will be able to:
  02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:
  03.01 Follow industry safety rules, regulations and policies.
  03.02 Demonstrate proper handling of hazardous materials.
  03.03 Demonstrate awareness of appropriate ergonomics.
  03.04 Demonstrate proper care of equipment.
  03.05 Demonstrate appropriate use of equipment in an efficient manner.

09.0 Create appropriate lighting for location and/or set productions--The student will be able to:
  09.03 Use lighting equipment according to industry safety standards.
  09.06 Use lighting for effect to control mood and impact in production settings.

10.0 Operate a video camera--The student will be able to:
  10.01 Use current industry standard production video equipment.
  10.02 Align camera for studio production.
  10.03 Operate camera in studio and location (field) production environments.

11.0 Shoot studio and/or location footage--The student will be able to:
  11.01 Plan a shot to obtain required action/footage.
  11.03 Control camera movement to obtain required effects.
  11.04 Control lens, focal length, aperture and exposure to obtain required effects.
  11.06 Perform appropriate pre-production checks of equipment function.
  11.08 Define the various recording formats and media.

12.0 Record, mix and edit audio resources--The student will be able to:
  12.03 Set up audio recording equipment.
  12.05 Perform appropriate pre-production check of production equipment.

13.0 Operate control room equipment--The student will be able to:
  13.01 Define control room functions in a production.
  13.02 Use the audio console (mixer) in a production.
  13.04 Operate camera switching and traffic control equipment.

14.0 Organize and edit video resources--The student will be able to:
  14.01 Log and organize video resources.
  14.03 Input video resources into post-production equipment and workflow.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Video Fundamentals**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010214
Program Type	College Credit Certificate (CCC)
Program Length	12 Credit Hours
CTSO	27-4031
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610010212).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student

Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
09.0 Create appropriate lighting for location and/or set productions.
10.0 Operate a video camera.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources.
14.0 Organize and edit video resources.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Video Fundamentals**
CIP Number: **0610.010214**
Program Length: **12 Credit Hours**
SOC Code(s): **27-4031**

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610010212). At the completion of this program, the student will be able to:

02.0 Demonstrate team skills--The student will be able to:
- 02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:
- 03.02 Follow industry safety rules, regulations and policies.
- 03.03 Demonstrate proper handling of hazardous materials.
- 03.04 Demonstrate awareness of appropriate ergonomics.
- 03.05 Demonstrate proper care of equipment.
- 03.06 Demonstrate appropriate use of equipment in an efficient manner.

09.0 Create appropriate lighting for location and/or set productions--The student will be able to:
- 09.03 Use lighting equipment according to industry safety standards.
- 09.04 Define light quality in terms of intensity, color, direction and characteristics.
- 09.05 Light a location set with ambient/available and supplemental lighting.

10.0 Operate a video camera--The student will be able to:
- 10.01 Use current industry standard production video equipment.
- 10.03 Operate camera in studio and location (field) production environments.

11.0 Shoot studio and/or location footage--The student will be able to:
- 11.01 Plan a shot to obtain required action/footage.
- 11.02 Demonstrate appropriate shot sequences, transitions and post production (edit) effects.
- 11.03 Control camera movement to obtain required effects.
- 11.04 Control lens, focal length, aperture and exposure to obtain required effects.
- 11.06 Perform appropriate pre-production checks of equipment function.
- 11.08 Define the various recording formats and media.

12.0 Record, mix and edit audio resources--The student will be able to:
- 12.01 Identify and select microphones for production needs.
- 12.03 Set up audio recording equipment.
- 12.05 Perform appropriate pre-production check of production equipment.

14.0 Organize and edit video resources--The student will be able to:
- 14.01 Log and organize video resources.
- 14.02 Operate editing hardware and software.
- 14.03 Input video resources into post-production equipment and workflow.
- 14.04 Perform assemble edits for appropriate effect.

14.05 Perform insert edits for appropriate effect.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Webcast Media**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010215
Program Type	College Credit Certificate (CCC)
Program Length	12 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for employment as webcast production assistants or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to television, broadcast, video, design and internet media training. This program focuses on broad transferable skills and stresses understanding and demonstration of the following elements of the television video and internet/webcast industries; working as part of a team, safe and efficient work practices, use of lighting equipment, organization and editing of video resources, and design and generation of graphic elements.

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:
02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
09.0 Create appropriate lighting for location and/or set productions.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources.
14.0 Organize and edit video resources.
15.0 Design and generate graphic elements.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Webcast Media**
CIP Number:	**0610.010215**
Program Length:	**12 Credit Hours**
SOC Code(s):	**27-4049**

02.0 Demonstrate team skills--The student will be able to:
  02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:
  03.01 Follow industry safety rules, regulations and policies.
  03.02 Demonstrate proper handling of hazardous materials.
  03.03 Demonstrate awareness of appropriate ergonomics.
  03.04 Demonstrate proper care of equipment.
  03.05 Demonstrate appropriate use of equipment in an efficient manner.

09.0 Create appropriate lighting for location and/or set productions--The student will be able to:
  09.01 Determine appropriate lighting needs for production settings.
  09.03 Use lighting equipment according to industry safety standards.

11.0 Shoot studio and/or location footage--The student will be able to:
  11.01 Plan a shot to obtain required action/footage.
  11.02 Demonstrate appropriate shot sequences, transitions and post production (edit) effects.
  11.06 Perform appropriate pre-production checks of equipment function.
  11.08 Define the various recording formats and media.
  11.09 Define appropriate digital compression and signal (file) types.

12.0 Record, mix and edit audio resources--The student will be able to:
  12.03 Set up audio recording equipment.
  12.04 Establish appropriate recording conditions.
  12.05 Perform appropriate pre-production check of production equipment.

14.0 Organize and edit video resources--The student will be able to:
  14.01 Log and organize video resources.
  14.03 Input video resources into post-production equipment and workflow.

15.0 Design and generate graphic elements--The student will be able to:
  15.02 Operate graphic production software.
  15.03 Produce broadcast graphic elements for titling, credits and graphic transitions.
  15.07 Demonstrate an understanding of graphic image types, file formats, and technical requirements for a production.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Broadcast Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010216
Program Type	College Credit Certificate (CCC)
Program Length	24 Credit Hours
CTSO	27-4031
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for employment as broadcast production technicians or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to television, broadcast, video, design and internet media training. This program focuses on broad transferable skills and stresses understanding and demonstration of the following elements of the television video and internet/webcast industries; working as part of a team, safe and efficient work practices, use of lighting equipment, operation of video camera, set up and use of audio recording equipment, operation of control room equipment, and organization and editing of video resources.

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
06.0 Generate a production schedule.
07.0 Plan a production set.
09.0 Create appropriate lighting for location and/or set productions.
10.0 Operate a video camera.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources
13.0 Operate control room equipment.
14.0 Organize and edit video resources.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Broadcast Production**
CIP Number: **0610.010216**
Program Length: **24 Credit Hours**
SOC Code(s): **27-4031**

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212). At the completion of this program, the student will be able to:

02.0 Demonstrate team skills--The student will be able to:
  02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:
  03.01 Follow industry safety rules, regulations and policies.
  03.02 Demonstrate proper handling of hazardous materials.
  03.03 Demonstrate awareness of appropriate ergonomics.
  03.04 Demonstrate proper care of equipment.
  03.05 Demonstrate appropriate use of equipment in an efficient manner.

06.0 Generate a production schedule--The student will be able to:
  06.01 Define the segment or program type.

07.0 Plan a production set--The student will be able to:
  07.01 Define set requirements for program type.

09.0 Create appropriate lighting for location and/or set productions--The student will be able to:
  09.01 Determine appropriate lighting needs for production settings.
  09.02 Identify locations and studio lighting types, method of use and application.
  09.03 Use lighting equipment according to industry safety standards.
  09.04 Define light quality in terms of intensity, color, direction and characteristics.
  09.05 Light a location set with ambient/available and supplemental lighting.
  09.06 Use lighting for effect to control mood and impact in production settings.
  09.07 Use studio lighting master control equipment.

10.0 Operate a video camera--The student will be able to:
  10.01 Use current industry standard production video equipment.
  10.02 Align camera for studio production.
  10.03 Operate camera in studio and location (field) production environments.
  10.04 Operate (CCU) Camera Control Unit.

11.0 Shoot studio and/or location footage--The student will be able to:
  11.01 Plan a shot to obtain required action/footage.
  11.03 Control camera movement to obtain required effects.
  11.04 Control lens, focal length, aperture and exposure to obtain required effects.
  11.05 Set up camera and recording equipment sequence.
  11.06 Perform appropriate pre-production checks of equipment function.
  11.08 Define the various recording formats and media.

12.0 Record, mix and edit audio resources--The student will be able to:
- 12.01 Identify and select microphones for production needs.
- 12.02 Determine optimal microphone placement.
- 12.03 Set up audio recording equipment.
- 12.04 Establish appropriate recording conditions.
- 12.05 Perform appropriate pre-production check of production equipment.
- 12.08 Perform sound edits and enhancements.
- 12.10 Record location sound.
- 12.11 Record studio live sound.

13.0 Operate control room equipment--The student will be able to:
- 13.01 Define control room functions in a production.
- 13.02 Use the audio console (mixer) in a production.
- 13.03 Use vision control equipment.
- 13.04 Operate camera switching and traffic control equipment.
- 13.05 Operate routing switcher for production and tape dubs.

14.0 Organize and edit video resources--The student will be able to:
- 14.01 Log and organize video resources.
- 14.02 Operate editing hardware and software.
- 14.03 Input video resources into post-production equipment and workflow.
- 14.04 Perform assemble edits for appropriate effect.
- 14.05 Perform insert edits for appropriate effect.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Video Editing and Post Production**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010217
Program Type	College Credit Certificate (CCC)
Program Length	24 Credit Hours
CTSO	27-4032
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for employment as video production technicians or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to television, broadcast, video, design and internet media training. This program focuses on broad transferable skills and stresses understanding and demonstration of the following elements of the television video and internet/webcast industries; working as part of a team, safe and efficient work practices, use of editing equipment, use of lighting equipment, operation of video camera, set up and operation of audio recording equipment, design and generation of graphic elements and organization and editing of video resources.

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
06.0 Generate a production schedule.
07.0 Plan a production set.
09.0 Create appropriate lighting for location and/or set productions.
10.0 Operate a video camera.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources.
14.0 Organize and edit video resources.
15.0 Design and generate graphic elements.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Video Editing and Post-Production**
CIP Number: **0610.010217**
Program Length: **24 Credit Hours**
SOC Code(s): **27-4032**

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212). At the completion of this program, the student will be able to:

02.0 Demonstrate team skills-- The student will be able to:
  02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices-- The student will be able to:
  03.01 Follow industry safety rules, regulations and policies.
  03.02 Demonstrate proper handling of hazardous materials.
  03.03 Demonstrate awareness of appropriate ergonomics.
  03.04 Demonstrate proper care of equipment.
  03.05 Demonstrate appropriate use of equipment in an efficient manner.

06.0 Generate a production schedule-- The student will be able to:
  06.01 Define the segment or program type.

07.0 Plan a production set-- The student will be able to:
  07.01 Define set requirements for program type.

09.0 Create appropriate lighting for location and/or set productions-- The student will be able to:
  09.01 Determine appropriate lighting needs for production settings.
  09.02 Identify locations and studio lighting types, method of use and application.
  09.03 Use lighting equipment according to industry safety standards.
  09.04 Define light quality in terms of intensity, color, direction and characteristics.
  09.05 Light a location set with ambient/available and supplemental lighting.

10.0 Operate a video camera-- The student will be able to:
  10.01 Use current industry standard production video equipment.
  10.03 Operate camera in studio and location (field) production environments.

11.0 Shoot studio and/or location footage-- The student will be able to:
  11.01 Plan a shot to obtain required action/footage.
  11.02 Demonstrate appropriate shot sequences, transitions and post production edit effects.
  11.03 Control camera movement to obtain required effects.
  11.04 Control lens, focal length, aperture and exposure to obtain required effects.
  11.05 Set up camera and recording equipment sequence.
  11.06 Perform appropriate pre-production checks of equipment function.
  11.07 Perform basic routine, preventative and repair maintenance on video equipment.
  11.08 Define the various recording formats and media.

12.0 Record, mix and edit audio resources-- The student will be able to:
  - 12.01 Identify and select microphones for production needs.
  - 12.02 Determine optimal microphone placement.
  - 12.03 Set up audio recording equipment.
  - 12.04 Establish appropriate recording conditions.
  - 12.05 Perform appropriate pre-production check of production equipment.
  - 12.08 Perform sound edits and enhancements.
  - 12.10 Record location sound.

14.0 Organize and edit video resources-- The student will be able to:
  - 14.01 Log and organize video resources.
  - 14.02 Operate editing hardware and software.
  - 14.03 Input video resources into post-production equipment and workflow.
  - 14.04 Perform assemble edits for appropriate effect.
  - 14.05 Perform insert edits for appropriate effect.
  - 14.06 Maintain continuity and production values.
  - 14.07 Mix audio and video resources for final cut.
  - 14.08 Apply color correction to video footage.

15.0 Design and generate graphic elements-- The student will be able to:
  - 15.01 Determine the graphic requirements for a production.
  - 15.02 Operate graphic production software.
  - 15.03 Produce broadcast graphic elements for titling, credits and graphic transitions.
  - 15.04 Determine the special effects need for a production.
  - 15.05 Set up and operate character generator equipment and software.
  - 15.06 Generate appropriate special effects and animated elements for a production.
  - 15.07 Demonstrate an understanding of graphic image types, file formats, and technical requirements for a production.
  - 15.08 Use image editing (bit mapped) software.
  - 15.09 Edit graphics into the program or segment.
  - 15.10 Demonstrate an ability to use type, color, composition and graphic elements for a specific production effect.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Webcast Technology**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010218
Program Type	College Credit Certificate (CCC)
Program Length	24 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for employment as webcast production assistants or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to television, broadcast, video, design and internet media training. This program focuses on broad transferable skills and stresses understanding and demonstration of the following elements of the television video and internet/webcast industries; working as part of a team, safe and efficient work practices, use of lighting equipment, operation of video camera, set up and operation of audio recording equipment, design and generation of graphic elements, organization and editing of video resources, and planning, coordination and management of a video or webcast production

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
06.0 Generate a production schedule.
07.0 Plan a production set.
09.0 Create appropriate lighting for location and/or set productions.
10.0 Operate a video camera.
11.0 Shoot studio and/or location footage.
12.0 Record, mix and edit audio resources.
13.0 Operate control room equipment.
14.0 Organize and edit video resources.
15.0 Design and generate graphic elements.
17.0 Plan, coordinate and manage a video or webcast production.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Webcast Technology**
CIP Number: **0610.010218**
Program Length: **24 Credit Hours**
SOC Code(s): **27-4049**

This certificate program is part of the Digital Television and Media Production AS/AAS degree program (0610.010212). At the completion of this program, the student will be able to:

02.0 Demonstrate team skills-- The student will be able to:
  02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices-- The student will be able to:
  03.01 Follow industry safety rules, regulations and policies.
  03.02 Demonstrate proper handling of hazardous materials.
  03.03 Demonstrate awareness of appropriate ergonomics.
  03.04 Demonstrate proper care of equipment.
  03.05 Demonstrate appropriate use of equipment in an efficient manner.

06.0 Generate a production schedule-- The student will be able to:
  06.01 Define the segment or program type.

07.0 Plan a production set-- The student will be able to:
  07.01 Define set requirements for program type.

09.0 Create appropriate lighting for location and/or set productions-- The student will be able to:
  09.01 Determine appropriate lighting needs for production settings.
  09.02 Identify locations and studio lighting types, method of use and application.
  09.03 Use lighting equipment according to industry safety standards.

10.0 Operate a video camera-- The student will be able to:
  10.01 Use current industry standard production video equipment.
  10.02 Align camera for studio production.
  10.03 Operate camera in studio and location (field) production environments.

11.0 Shoot studio and/or location footage-- The student will be able to:
  11.01 Plan a shot to obtain required action/footage.
  11.02 Demonstrate appropriate shot sequences, transitions and post production (edit) effects.
  11.03 Control camera movement to obtain required effects.
  11.04 Control lens, focal length, aperture and exposure to obtain required effects.
  11.05 Set up camera and recording equipment sequence.
  11.06 Perform appropriate pre-production checks of equipment function.
  11.08 Define the various recording formats and media.
  11.09 Define appropriate digital compression and signal (file) types.

12.0 Record, mix and edit audio resources-- The student will be able to:

12.01 Identify and select microphones for production needs.
12.02 Determine optimal microphone placement.
12.03 Set up audio recording equipment.
12.04 Establish appropriate recording conditions.
12.05 Perform appropriate pre-production check of production equipment.
12.08 Perform sound edits and enhancements.
12.10 Record location sound.
12.11 Record studio live sound.

13.0 Operate control room equipment-- The student will be able to:
13.01 Define control room functions in a production.
13.02 Use the audio console (mixer) in a production.

14.0 Organize and edit video resources-- The student will be able to:
14.01 Log and organize video resources.
14.02 Operate editing hardware and software.
14.03 Input video resources into post-production equipment and workflow.
14.04 Perform assemble edits for appropriate effect.
14.05 Perform insert edits for appropriate effect.

15.0 Design and generate graphic elements-- The student will be able to:
15.01 Determine the graphic requirements for a production.
15.02 Operate graphic production software.
15.03 Produce broadcast graphic elements for titling, credits and graphic transitions.
15.06 Generate appropriate special effects and animated elements for a production.
15.07 Demonstrate an understanding of graphic image types, file formats, and technical requirements for a production.
15.08 Use image editing (bit mapped) software.
15.09 Edit graphics into the program or segment.

17.0 Plan, coordinate and manage a video or webcast production— The student will be able to:
17.01 Define the program/segment format and market.
17.03 Develop a production schedule.
17.09 Direct final production values.
17.10 Archive and manage finished assets and originals.
17.11 Oversee broadcast/distribution to market.
17.13 Explain the techniques and procedures of web hosts, portals, television broadcast and cable networks, syndication and public broadcasters.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Media/Multimedia Presentation**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610.010219
Program Type	College Credit Certificate (CCC)
Program Length	17 Credit Hours
CTSO	43-9031
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for initial employment as an audio/visual technician, audio technician, lighting technician, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to, the learning of management skills permitting the graduate to oversee the operation of institutional and industrial multiple media operations. Instruction includes: use of multimedia hardware and software, production analysis, the design and production of digital media/multimedia projects, digital media/multimedia management and the application of production skills to solving the problems relating to the integration of multiple media. Also included are skills relating to professionalism, employability, communication, and management.

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Use industry standard digital media/multimedia hardware and software.
02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies.
03.0 Design and generate still imagery.
05.0 Design and execute audio technology for a digital media/multimedia project.
06.0 Use computer applications for digital media/multimedia projects.
07.0 Produce digital media/multimedia projects..

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Media/Multimedia Presentation**
CIP Number: **0610.010219**
Program Length: **17 Credit Hours**
SOC Code(s): **43-9031**

This certificate program is part of the Digital Media/Multimedia Technology AS/AAS degree program (0610010202). At the completion of this program, the student will be able to:

01.0 Use industry standard digital media/ multimedia hardware and software--The student will be able to:
- 01.01 Demonstrate the proper care and handling of equipment used in digital media/ multimedia.
- 01.02 Perform pre and post production routines for proper presentations.
- 01.03 Analyze equipment performance to meet industry standards.

02.0 Create projects and presentations utilizing a variety of digital media/multimedia technologies--The student will be able to:
- 02.01 Appraise production resources to achieve desired outcomes.
- 02.03 Utilize production techniques to create the desired outcomes.
- 02.04 Adapt learned skills and generate new approaches in order to solve unique production problems.

03.0 Design and generate video and/or animations--The student will be able to:
- 03.04 Understand the properties of light and how to measure its intensity and color.

05.0 Design and execute audio technology for a digital media/multimedia project--The student will be able to:
- 05.01 Capture, manipulate and apply audio and sound in a digital media/multimedia project.
- 05.02 Differentiate and optimize formats for audio and sound.
- 05.03 Evaluate production needs for microphone applications.
- 05.04 Demonstrate proficiency with a multi-channel audio mixer.
- 05.05 Generate strategies for and electronic editing.
- 05.06 Generate strategies for multi-track recording to industry standards.

06.0 Use computer applications for digital media/multimedia projects--The student will be able to:
- 06.01 Demonstrate a basic proficiency with digital media/multimedia software packages.
- 06.04 Present digital media/multimedia content.

07.0 Produce digital media/multimedia projects--The student will be able to:
- 07.01 Assess needs of the end user.
- 07.02 Analyze resources available.
- 07.04 Create and write a script appropriate to the media selected.
- 07.05 Create and prepare a storyboard appropriate to the media selected.

07.08 Synthesize component elements of available digital media/multimedia technologies into a unified project.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Photographic Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1610.010300	0610.010300
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	27-4021	27-4021
SOC Codes (all applicable)	SkillsUSA	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare students for employment as a photographer or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, using film, cameras, chemicals, photographic papers, laboratory practices, photographic equipment, and technical recording and reporting.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Photography industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Shop or laboratory activities are an integral part of this program and provide instruction in the tools, test equipment, materials and processes used in the photography program similar to those used in industry. Students should be able to use the various types of precision equipment found in general use throughout the photography industry for the purpose of photographing, processing and presenting photography

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Photography (0610010301) - 22 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Perform laboratory skills.
02.0 Control exposures (35mm camera).
03.0 Take basic photographs (35mm camera).
04.0 Operate various format cameras.
05.0 Finish photographs.
06.0 Apply lighting techniques.
07.0 Take studio photographs.
08.0 Reproduce photographic media.
09.0 Process color film.
10.0 Print color photographs.
11.0 Produce media presentations.
12.0 Demonstrate competencies required to manage a photographic business.
13.0 Take photographs for news media.
14.0 Apply quality control.
15.0 Demonstrate appropriate communication skills.
16.0 Demonstrate appropriate math skills.
17.0 Demonstrate appropriate understanding of basic science.
18.0 Demonstrate employability skills.
19.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Photographic Technology**
CIP Numbers:	**0610.010300 AAS** **1610.010300 AS**
Program Length:	**64 Credit Hours**
SOC Code(s):	**27-4021**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Perform laboratory skills--The student will be able to:
- 01.01 Mix developers and other chemicals.
- 01.02 Hand-process black and white film.
- 01.03 Print black and white photographs.
- 01.04 Process black and white paper.
- 01.05 Process high contrast film.
- 01.06 Perform toning skills.
- 01.07 Produce pan masking.
- 01.08 Produce black and white print using automated processing.

02.0 Control exposures (35mm camera)--The student will be able to:
- 02.01 Set appropriate F-stops and shutter speeds.
- 02.02 Select appropriate film type.

03.0 Take basic photographs (35mm camera)--The student will be able to:
- 03.01 Apply camera care and maintenance principles.
- 03.02 Compose photographs.
- 03.03 Take still photographs.
- 03.04 Take action photographs.

04.0 Operate various format cameras--The student will be able to:
- 04.01 Use a 2¼ format camera.
- 04.02 Use a view camera.
- 04.03 Use a front screen projection system.
- 04.04 Use 8 X 10 format.

05.0 Finish photographs--The student will be able to:
- 05.01 Mount photographs.
- 05.02 Mat/frame photographs.
- 05.03 Apply print retouching.
- 05.04 Apply color lacquer spray.
- 05.05 Apply photo enhancement.

06.0 Apply lighting techniques--The student will be able to:
- 06.01 Take photographs with available light.
- 06.02 Take photographs with electronic strobe.

- 06.03 Take photographs with photo-flood lighting.
- 06.04 Take photographs with quartz lighting.
- 06.05 Take photographs with parabolic lighting.

07.0 Take studio photographs--The student will be able to:

- 07.01 Take commercial photographs.
- 07.02 Take portraits.
- 07.03 Take industrial photographs.

08.0 Reproduce photographic media--The student will be able to:

- 08.01 Copy prints.
- 08.02 Copy transparencies.
- 08.03 Make inter-negatives.
- 08.04 Make a translite.
- 08.05 Make a halftone print.
- 08.06 Identify and define color separation.

09.0 Process color film--The student will be able to:

- 09.01 Hand process color negatives and transparencies.
- 09.02 Process color negatives and transparencies with automation.
- 09.03 Mix color film chemistry and maintain replenishment.

10.0 Print color photographs--The student will be able to:

- 10.01 Process color paper.
- 10.02 Print color negatives.
- 10.03 Print color negatives using color analyzer.
- 10.04 Mix color paper chemistry and maintain replenishment.
- 10.05 Print color transparencies.

11.0 Produce media presentations--The student will be able to:

- 11.01 Prepare script for slide presentation.
- 11.02 Shoot slides for slide presentation.
- 11.03 Produce slide presentation.
- 11.04 Prepare script for video presentation.
- 11.05 Shoot video tapes.
- 11.06 Produce video presentation.
- 11.07 Prepare storyboard for slide presentation.
- 11.08 Record sound for slide presentation.
- 11.09 Record sound for video presentation.

12.0 Demonstrate competencies required to manage a photographic business—The student will be able to:

- 12.01 Apply communication skills.
- 12.02 Apply human relations skills.
- 12.03 Set rates for photographic work.
- 12.04 Maintain shop records and files.
- 12.05 Develop effective advertising.
- 12.06 Maintain presentational portfolio.
- 12.07 Analyze potential market area.
- 12.08 Analyze and develop a marketing plan.
- 12.09 Perform cost analysis.

12.10 Apply accounting techniques.

13.0 Take photographs for news media--The student will be able to:
- 13.01 Identify photographer's legal rights/responsibilities.
- 13.02 Identify rules/regulations of copyright.
- 13.03 Take photographs for news media.
- 13.04 Write captions for photos.
- 13.05 Identify special camera accessories.
- 13.06 Identify specialized optics for photojournalism.

14.0 Apply quality control--The student will be able to:
- 14.01 Run control strips.
- 14.02 Plot control results.
- 14.03 Graft processors performance.
- 14.04 Maintain pH control of chemistry.
- 14.05 Operate densitometer.

15.0 Demonstrate appropriate communication skills--The student will be able to:
- 15.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
- 15.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
- 15.03 Read and follow written and oral instructions.
- 15.04 Answer and ask questions coherently and concisely.
- 15.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
- 15.06 Demonstrate appropriate telephone/communication skills.

16.0 Demonstrate appropriate math skills--The student will be able to:
- 16.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
- 16.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
- 16.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 16.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 16.05 Demonstrate an understanding of federal, state and local taxes and their computation.

17.0 Demonstrate appropriate understanding of basic science--The student will be able to:
- 17.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
- 17.02 Draw conclusions or make inferences from data.
- 17.03 Identify health related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 17.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

18.0 Demonstrate employability skills--The student will be able to:
- 18.01 Conduct a job search.
- 18.02 Secure information about a job.

18.03 Identify documents which may be required when applying for a job interview.
18.04 Complete a job application form correctly.
18.05 Demonstrate competence in job interview techniques.
18.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
18.07 Identify acceptable work habits.
18.08 Demonstrate knowledge of how to make job changes appropriately.
18.09 Demonstrate acceptable employee health habits.
18.10 Demonstrate knowledge of the "Federal Right-To-Know Law" as recorded in 29 CFR-1910,1200.

19.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
19.01 Define entrepreneurship.
19.02 Describe the importance of entrepreneurship to the American economy.
19.03 List the advantages and disadvantages of business ownership.
19.04 Identify the risks involved in ownership of a business.
19.05 Identify the necessary personal characteristics of a successful entrepreneur.
19.06 Identify the business skills needed to operate a small business efficiently and effectively.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Photography**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0610010301
Program Type	College Credit Certificate (CCC)
Program Length	22 Credit Hours
CTSO	27-4021
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Photographic Technology AS/AAS degree program (0610.010300).

The purpose of this program is to prepare students for employment as a photographer or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, using digital cameras, image editing software, inkjet photographic papers, computer editing practices, photographic equipment, and technical recording and reporting.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Photography industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Shop or laboratory activities are an integral part of this program and provide instruction in the tools, test equipment, materials and processes used in the photography program similar to those used in industry. Students should be able to use the various types of precision equipment found in general use throughout the photography industry for the purpose of photographing, processing and presenting photography.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Perform laboratory skills.
02.0 Control exposures (35mm and digital).
03.0 Take basic photographs (35mm and digital).
05.0 Finish photographs.
06.0 Apply lighting techniques.
07.0 Take studio photographs.
08.0 Reproduce photographic media (film to digital only).
10.0 Print color photographs (digital only
11.0 Produce media presentations.
12.0 Demonstrate competencies required to manage a photographic business.

13.0 Take photographs for news media.
14.0 Apply quality control.
15.0 Demonstrate appropriate communication skills.
16.0 Demonstrate appropriate math skills.
17.0 Demonstrate appropriate understanding of basic science.
18.0 Demonstrate employability skills.
19.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Photography**
CIP Number: **0610010301**
Program Length: **22 Credit Hours**
SOC Code(s): **27-4021**

This certificate program is part of the Photographic Technology AS/AAS degree program (0610.010300). At the completion of this program, the student will be able to:

01.0 Perform laboratory skills--The student will be able to:
- 01.01 Mix developers and other chemicals.
- 01.02 Hand-process black and white film.
- 01.03 Print black and white photographs.
- 01.04 Process black and white paper.
- 01.05 Process high contrast film.
- 01.06 Perform toning skills.
- 01.07 Produce pan masking.
- 01.08 Produce black and white print using automated processing.

02.0 Control exposures (35mm camera)--The student will be able to:
- 02.01 Set appropriate F-stops and shutter speeds.
- 02.02 Select appropriate film type.

03.0 Take basic photographs (35mm camera and digital)--The student will be able to:
- 03.01 Apply camera care and maintenance principles.
- 03.02 Compose photographs.
- 03.03 Take still photographs.
- 03.04 Take action photographs.

05.0 Finish photographs--The student will be able to:
- 05.01 Mount photographs.
- 05.02 Mat/frame photographs.
- 05.03 Apply print retouching.
- 05.04 Apply color lacquer spray.
- 05.05 Apply photo enhancement.

06.0 Apply lighting techniques--The student will be able to:
- 06.01 Take photographs with available light.
- 06.02 Take photographs with electronic strobe.
- 06.03 Take photographs with photo-flood lighting.
- 06.04 Take photographs with quartz lighting.
- 06.05 Take photographs with parabolic lighting.

07.0 Take studio photographs--The student will be able to:
- 07.01 Take commercial photographs.
- 07.02 Take portraits.
- 07.03 Take industrial photographs.

08.0 Reproduce photographic media--The student will be able to:
  08.01 Copy prints.
  08.02 Copy transparencies.
  08.06 Identify and define color separation.

10.0 Print color photographs (from digital only)--The student will be able to:
  10.01 Process color paper.
  10.03 Print color negatives using color analyzer.

11.0 Produce media presentations--The student will be able to:
  11.01 Prepare script for slide presentation.
  11.02 Shoot slides for slide presentation.
  11.03 Produce slide presentation.
  11.07 Prepare storyboard for slide presentation.

12.0 Demonstrate competencies required to manage a photographic business—The student will be able to:
  12.01 Apply communication skills.
  12.02 Apply human relations skills.
  12.03 Set rates for photographic work.
  12.04 Maintain shop records and files.
  12.05 Develop effective advertising.
  12.06 Maintain presentational portfolio.
  12.07 Analyze potential market area.
  12.08 Analyze and develop a marketing plan.
  12.09 Perform cost analysis.
  12.10 Apply accounting techniques.
  12.11 Prepare basic media release

13.0 Take photographs for news media--The student will be able to:
  13.01 Identify photographers legal rights/responsibilities.
  13.02 Identify rules/regulations of copyright.
  13.03 Take photographs for news media.
  13.04 Write captions for photos.
  13.05 Identify special camera accessories.
  13.06 Identify specialized optics for photojournalism.

14.0 Apply quality control--The student will be able to:
  14.01 Run control strips. (Perform color calibration on monitor)
  14.02 Plot control results.

15.0 Demonstrate appropriate communication skills--The student will be able to:
  15.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
  15.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
  15.03 Read and follow written and oral instructions.
  15.04 Answer and ask questions coherently and concisely.
  15.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
  15.06 Demonstrate appropriate telephone/communication skills.

16.0 Demonstrate appropriate math skills--The student will be able to:
   16.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
   16.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
   16.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
   16.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
   16.05 Demonstrate an understanding of federal, state and local taxes and their computation.

17.0 Demonstrate appropriate understanding of basic science--The student will be able to:
   17.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
   17.02 Draw conclusions or make inferences from data.
   17.03 Identify health related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
   17.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

18.0 Demonstrate employability skills--The student will be able to:
   18.01 Conduct a job search.
   18.02 Secure information about a job.
   18.03 Identify documents which may be required when applying for a job interview.
   18.04 Complete a job application form correctly.
   18.05 Demonstrate competence in job interview techniques.
   18.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
   18.07 Identify acceptable work habits.
   18.08 Demonstrate knowledge of how to make job changes appropriately.
   18.09 Demonstrate acceptable employee health habits.
   18.10 Demonstrate knowledge of the "Federal Right-To-Know Law" as recorded in 29 CFR-1910,1200.

19.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
   19.01 Define entrepreneurship.
   19.02 Describe the importance of entrepreneurship to the American economy.
   19.03 List the advantages and disadvantages of business ownership.
   19.04 Identify the risks involved in ownership of a business.
   19.05 Identify the necessary personal characteristics of a successful entrepreneur.
   19.06 Identify the business skills needed to operate a small business efficiently and effectively.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Radio and Television Broadcast Programming**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1610.010402	0610.010402
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-4032	27-4032
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare the student for employment as a broadcast director.

The content includes but is not limited to: commercial or industrial TV and radio/studio assisting, camera operating, technical directing, producing video tape or film chain operating, audio controlling, gaffing, grip, or script writing. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Radio and Television industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Laboratory activities include the preparation and execution of both radio and TV production in the studio and in the field (ENG and EFP). Activity includes writing, story-boarding, setting up, rehearsing, and production. In addition, the student may take a three credit internship and work in a local TV or radio station, or an audio or video production house.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education

coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).This AS/AAS degree program includes the following College Credit Certificates:

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate knowledge of the television production technology program instructional system, safety procedures and trade terminology.
02.0 Plan a set for television production.
03.0 Perform lighting activities for a planned production.
04.0 Operate studio color television camera.
05.0 Perform video tape recording and editing operations.
06.0 Perform television production and programming activities.
07.0 Perform character generator and special effects generator functions.
08.0 Operate television studio audio control system.
09.0 Perform electronic news gathering (ENG) and electronic field production (EFP) equipment functions.
10.0 Perform basic film operations.
11.0 Perform routine operator preventative maintenance operations.
12.0 Demonstrate appropriate communication skills.
13.0 Demonstrate appropriate math skills.
14.0 Demonstrate appropriate understanding of basic science.
15.0 Demonstrate employability skills.
16.0 Demonstrate appropriate broadcast speaking manner.
17.0 Operate control room equipment.
18.0 Demonstrate radio broadcasting skills.
19.0 Explain and demonstrate news broadcasting.
20.0 Write broadcast news.
21.0 Explain and demonstrate ability to properly control radio traffic.
22.0 Write commercial copy.
23.0 Explain programming concepts.
24.0 Describe business aspects of broadcasting.
25.0 Explain surveys and demographics.
26.0 Explain rules and regulations governing radio broadcasts.
27.0 Perform radio broadcasting functions.
28.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Radio and Television Broadcast Programming**
CIP Numbers: **0610.010402 AAS**
1610.010402 AS
Program Length: **64 Credit Hours**
SOC Code(s): **27-4032**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of the television production technology program instructional system, safety procedures and trade terminology—The student will be able to:
  01.01 Describe the operating system of the vocational program.
  01.02 State and apply general safety rules for operation of equipment and learning activities in the lab.
  01.03 Utilize trade terminology in the television production lab.
  01.04 Utilize trade abbreviations and acronyms as appropriate.
  01.05 Transport equipment safely and securely.
  01.06 Store equipment in appropriate locations.

02.0 Plan a set for television production--The student will be able to:
  02.01 Prepare television set for a planned production.
  02.02 Draw and design a set plan to scale.
  02.03 Select and arrange stage props.
  02.04 Utilize hand tools to construct scene components.
  02.05 Inspect and repair scenery as needed.

03.0 Perform lighting activities for a planned production--The student will be able to:
  03.01 Describe types of lighting fixtures.
  03.02 Identify parts of lighting fixtures.
  03.03 Perform special-effects lighting.
  03.04 Set-up appropriate lighting for a production.
  03.05 Describe functions of master lighting panel and dimmer board.
  03.06 Operate master lighting panel to dimmer board.
  03.07 Analyze lighting needs for production.
  03.08 Describe dangers of high intensity studio lighting.
  03.09 Understand lighting theory.

04.0 Operate studio color television camera--The student will be able to:
  04.01 Describe major parts of a studio camera.
  04.02 Align camera for a studio production.
  04.03 Perform appropriate camera movements.
  04.04 Operate camera for commercial recording.
  04.05 Operate camera for studio production.
  04.06 Perform floor director's functions.
  04.07 Understand CCU Camera Control Unit.

05.0 Perform video tape recording and editing operations--The student will be able to:
- 05.01 Identify and describe different video tape machines.
- 05.02 Describe operational parts of a video tape machine.
- 05.03 Operate video tape machine to record and playback.
- 05.04 Describe operational parts of a video cassette editor.
- 05.05 Perform assemble edits.
- 05.06 Perform insert edits.
- 05.07 Set up video tape machines.
- 05.08 Set up video cassette editor.
- 05.09 Recognize different video tape formats.

06.0 Perform television production and programming activities—The student will be able to:
- 06.01 Operate master switcher.
- 06.02 Operate routing switcher for production and tape dubs.
- 06.03 Set up machines and tuner for in-house playback.
- 06.04 Develop script for a program.
- 06.05 Draw story board for a planned production.
- 06.06 Direct participants in production of a program.
- 06.07 Perform on-camera.
- 06.08 Act as producer to get program from idea to air.
- 06.09 Operate through the lens teleprompter.

07.0 Perform character generator and special effects generator functions—The student will be able to:
- 07.01 Describe operational parts of character generator.
- 07.02 Set up character generator.
- 07.03 Describe inputs of special effects generator.
- 07.04 Operate special effects generator during production.
- 07.05 Operate character generator during production.
- 07.06 Demonstrate basic computer literacy.
- 07.07 Demonstrate knowledge of computer generated video graphics.

08.0 Operate television studio audio control system--The student will be able to:
- 08.01 Identify and select microphones for production.
- 08.02 Place microphones for maximum effect.
- 08.03 Describe parts of cartridge machine.
- 08.04 Set up cartridge machine for production.
- 08.05 Operate cartridge machine during recording and playback.
- 08.06 Describe parts of reel-to-reel tape machine.
- 08.07 Set up reel-to-reel tape and cassette tape machines for production.
- 08.08 Operate reel-to-reel tape and cassette tape machines for production.
- 08.09 Describe parts of a turntable.
- 08.10 Operate turntable for production.
- 08.11 Describe parts of audio mixing console.
- 08.12 Operate audio mixing console.
- 08.13 Operate cassette with search for production.
- 08.14 Operate compact disc sound source during production.

09.0 Perform Electronic News Gathering (ENG) and Electronic Field Production (EFP) equipment functions--The student will be able to:

09.01 Describe ENG and EFP port-a-PAC components.
09.02 Set up port-a-PAC for field production.
09.03 Operate port-a-PAC during production segments.
09.04 Complete a field production from writing to shooting to VCR electronic editing.

10.0 Perform basic film operations--The student will be able to:
10.01 Operate film editor.
10.02 Edit film for time slot.
10.03 Describe parts of Film Island.
10.04 Set-up Film Island for production.
10.05 Demonstrate skill in both cut and paste editing and transfer to tape electronic editing.

11.0 Perform routine operator preventative maintenance operations—The student will be able to:
11.01 Describe types of video connectors.
11.02 Describe types of audio connectors.
11.03 Assemble audio and video cables.
11.04 Clean tape heads on audio recording equipment.
11.05 Clean tape heads on video recording equipment.
11.06 Replace broken knobs.
11.07 Replace sliders and potentiometers.
11.08 Replace headshell/cartridge and balance tone arm.
11.09 Replace bulb in light fixture.

12.0 Demonstrate appropriate communication skills--The student will be able to:
12.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
12.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
12.03 Read and follow written and oral instructions.
12.04 Answer and ask questions coherently and concisely.
12.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
12.06 Demonstrate appropriate telephone/communication skills.

13.0 Demonstrate appropriate math skills--The student will be able to:
13.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
13.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
13.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
13.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
13.05 Demonstrate an understanding of federal, state and local taxes and their computation.

14.0 Demonstrate appropriate understanding of basic science--The student will be able to:
14.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
14.02 Draw conclusions or make inferences from data.

14.03 Identify health related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
14.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

15.0 Demonstrate employability skills--The student will be able to:
15.01 Conduct a job search.
15.02 Secure information about a job.
15.03 Identify documents which may be required when applying for a job interview.
15.04 Complete a job application form correctly.
15.05 Demonstrate competence in job interview techniques.
15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
15.07 Identify acceptable work habits.
15.08 Demonstrate knowledge of how to make job changes appropriately.
15.09 Demonstrate acceptable employee health habits.
15.10 Prepare a resume.
15.11 Prepare an audio audition tape (required).
15.12 Prepare a video audition tape (optional).
15.13 Write a letter of introduction.
15.14 Demonstrate knowledge of Radio/TV career patterns.
15.15 Demonstrate knowledge of the "Federal Right-To-Know Law" as recorded in 29 CFR-1910, 1200.

16.0 Demonstrate appropriate broadcast speaking manner--The student will be able to:
16.01 Identify and correct his own vocal deficiencies.
16.02 Demonstrate his ability to breathe properly, project and control loudness, resonate his voice and vary tone, pitch and pace.
16.03 Articulate and pronounce words according to accepted standards.
16.04 Understand the basic elements of good speech.
16.05 Express feelings with voice.
16.06 Interpret copy for dramatic content.

17.0 Operate control room equipment--The student will be able to:
17.01 Demonstrate a working familiarity and understanding of the functions of an audio console (mixer).
17.02 State the characteristics of various microphone types and demonstrate the ability to use them.
17.03 Demonstrate knowledge of and ability to operate turntables, tape recorders, cart recorders and playbacks.
17.04 Handle remote sources through the console.
17.05 Demonstrate how to handle an audio portion of a deejay show and news program, putting together all the elements of audio control in radio.
17.06 Demonstrate ability to work as an audio control operator in TV or radio studio production.
17.07 Understand the ad-lib format and show proficiency in that style of broadcast.

18.0 Demonstrate radio broadcasting skills--The student will be able to:
18.01 Outline the qualifications and requirements of a radio announcer.
18.02 Demonstrate development of the skills of announcing, the various techniques of delivery and procedures according to accepted standards.

18.03 Demonstrate the ability to perform to standards before a TV camera, visually and orally.
18.04 Perform the various assignments in a professional manner, for both radio and TV, according to industry standards.

19.0 Explain and demonstrate news broadcasting--The student will be able to:
19.01 Differentiate between news, commentary, and editorials.
19.02 Demonstrate ability to mark, edit, and present news in an acceptable manner.
19.03 Demonstrate ability to use the various equipment of a newsroom.
19.04 Identify the various sources of news and how they are used.
19.05 Demonstrate ability to ad-lib from the scene, interview guests, and type news stories.
19.06 Understand and interpret criticism of broadcast news.

20.0 Write broadcast news--The student will be able to:
20.01 List the elements that constitute news materials and evaluate them.
20.02 Demonstrate ability to write news stories in broadcast style.
20.03 Be able to use the broadcast style page format.
20.04 Understand the technique of using present of past perfect tense in writing broadcast news.

21.0 Explain and demonstrate ability to properly control radio traffic--The student will be able to:
21.01 State the duties of the traffic department.
21.02 List the elements and procedures of log-keeping.
21.03 Demonstrate a working knowledge of the rules and regulations pertaining to traffic control and standards of performance.
21.04 Demonstrate the ability to create a program log.

22.0 Write commercial copy--The student will be able to:
22.01 Explain the job of a copy writer and outline the elements of good copy.
22.02 Demonstrate ability to write commercial continuity in its various forms.
22.03 Demonstrate ability to select and utilize music and sound effects in the production of recorded copy.
22.04 Demonstrate ability to edit, splice, dub, overlap sound or otherwise utilize various production techniques.

23.0 Explain programming concepts--The student will be able to:
23.01 List and explain the various functions under the control of the program director.
23.02 Differentiate between formats used in large and small markets.
23.03 Explain various methods of station promotion, including procedures and rules.
23.04 Explain the techniques and procedures of networks, syndication, news, talk, sports, special events, public service and music programs.
23.05 Identify the various music formats used in contemporary radio.
23.06 Understand FCC rules dealing with indecent programming and obscenity.

24.0 Explain business aspects of broadcasting--The student will be able to:
24.01 Explain the determination of cost and expense involved in station operation, the financial structure, the evaluation of time to the station and its clients.
24.02 List procedures and techniques of radio sales and demonstrate the ability to use maps, rate cards, contracts, etc., in accordance with station practice.

24.03 Explain the requirements and regulations of station ownership.
24.04 Describe the development of media advertising and explain the various forms utilized in the industry today.

25.0 Explain surveys and demographics--The student will be able to:
25.01 Explain the methods of measurement used by broadcasters and evaluate their function in the overall operation of a station.
25.02 Outline the methodology of pulse, ARB, and explain the use of the SRDS.

26.0 Explain rules and regulations governing radio broadcasts--The student will be able:
26.01 Demonstrate an understanding of rules and regulations governing licenses, measurement and records, political broadcasts, and lottery laws.
26.02 Will show an understanding of the features in Broadcasting magazine including the update on all Broadcasting litigation and lawmaking.

27.0 Perform radio broadcasting functions--The student will be able to:
27.01 Perform to high standards in the role of audio operator, announcer, deejay, newsman, interviewer and commercial production, in varied format situations.

28.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
28.01 Define entrepreneurship.
28.02 Describe the importance of entrepreneurship to the American economy.
28.03 List the advantages and disadvantages of business ownership.
28.04 Identify the risk involved in owning a business.
28.05 Identify the personal characteristics of a successful entrepreneur.
28.06 Identify the business skills needed to operate a small business efficiently and effectively.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Telecommunication Engineering Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1615.030302	0615.030302
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	49-2022	49-2022
SOC Codes (all applicable)	SkillsUSA	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

This program is designed to prepare students for employment as communications engineering technicians, television technicians, analysis technicians, 2-way cellular wireless technicians, network technicians, network operations specialists, product specialists, I.P. (Internet Protocol) engineers, technical salespersons, field engineers, field technicians, transmission engineers, technical support salespersons, installer/repair technicians, network engineers, or in related occupations, or to provide supplemental training to persons previously or currently employed in these occupations.

This specialization content includes, but is not limited to, basic electronics skills, transmission and distribution systems, telephony communication systems, digital communications, data communications and network communications.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Telecommunication Engineering industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Electronic laboratory activities are an integral part of this program. The tools, test equipment, materials and processes used in this laboratory are similar to those used in industry. Students should be able to use the various types of precision test equipment found in general use throughout the electronics industry for the purpose of analyzing, troubleshooting and repairing electronic circuitry

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student’s IEP or 504 plan or postsecondary student’s accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a “transfer value” assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Cable Installation (0615.030304) – 12 Credit Hours
Television System Support (0615.030305) – 24 Credit Hours
Network Communications (LAN) (0615.030306) – 18 Credit Hours
Network Communications (WAN) (0615.030307) – 18 Credit Hours
Wireless Communications (0615.030308) – 18 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing the program, **the student will be able to complete all of Outcomes**: 01.0, 02.0, and 03.0, and **additionally may specialize in one of the following combinations of Outcomes**: 05.0 and 06.0 (Networking and Telephony) **or** 04.0 and 07.0 (Transmission and Distribution Systems and Video).

01.0 Demonstrate knowledge of basic electronics.
02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems.
03.0 Demonstrate proficiency in design and analysis of digital communications systems.
04.0 Demonstrate proficiency in the analysis of transmission and distribution systems.
05.0 Demonstrate proficiency in network communications.
06.0 Demonstrate proficiency in the analysis of telephony communication systems.
07.0 Demonstrate proficiency in the analysis of analog and digital video systems.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Telecommunication Engineering Technology**
CIP Numbers:	**0615030302 AAS** **1615030302 AS**
Program Length:	**64 Credit Hours**
SOC Code(s):	**49-2022**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic electronics--The student will be able to:
  01.01 Perform various types of soldering.
  01.02 Perform various types of wiring and cable terminations.
  01.03 Demonstrate knowledge of AC/DC concepts and applications.
  01.04 Demonstrate knowledge of computer systems and basic applications.
  01.05 Demonstrate use of basic test and measurement equipment.
  01.06 Understand and demonstrate safety rules.
  01.07 Demonstrate understanding of digital fundamentals.

02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems--The student will be able to:
  02.01 Describe the principles and operation of amplitude modulation and frequency modulation.
  02.02 Demonstrate understanding of block diagrams and components of transmitter receiver circuits including mixers, IF amplifiers, local oscillators, modulators and demodulators.
  02.03 Identify, measure, analyze and troubleshoot AM and FM transmitter/receiver circuits including mixers, IF amplifiers, local oscillators, modulators, demodulators and speech amplifiers.
  02.04 Analyze, troubleshoot, and maintain transmitters and receivers, to include heterodyning, frequency synthesis, phase-locked-loop, filtering and automatic control circuits.
  02.05 Analyze, troubleshoot and adjust RF power amplifier circuits.
  02.06 Describe the operation of Double Side Band (DSB) and Single Side Band (SSB) radio systems.
  02.07 Identify the stages of SSB and DSB transmitter and receiver circuits.
  02.08 Design, analyze and troubleshoot SSB and DSB transmitter and receiver circuits.
  02.09 Conduct operating system checks and make minor adjustments to SSB and DSB transmitters and receivers.
  02.10 Analyze and test AM, SSB and DSB radio circuits using spectrum analyzers, noise analyzers, impedance meters, sweep generators, distortion meters and power meters.
  02.11 Analyze, adjust and troubleshoot Phase Modulation (PM) circuits.
  02.12 Analyze, adjust and troubleshoot FM transceiver circuits.

02.13 Test, adjust and align transmitters and receivers using the spectrum analyzer, sweep generator, noise analyzer, frequency meter, modulation meter, Impedance Bridge and power meter.
02.14 Describe the components and concepts of transmission systems: antennas, fiber optics, coax, copper, microwave, satellite, feed lines, and wave guides.
02.15 Calculate transmission line characteristics and understand impedance matching.
02.16 Analyze and describe the concepts of radio wave propagation and radiation fields.
02.17 Test, set up and adjust antenna systems using a power meter, network analyzer, and SWR meter.
02.18 Describe government rules, regulations, and permits.

03.0 Demonstrate proficiency in design and analysis of digital communication systems--The student will be able to:
03.01 Describe digital modulation techniques and systems.
03.02 Describe industry standards in digital communications.
03.03 Analyze, measure, and troubleshoot digital modulation systems.
03.04 Perform specific test and measurement as related to the digital devices and equipment.
03.05 Analyze and evaluate the operation of programmable digital filters.
03.06 Describe the operation and application of compression amplifiers.
03.07 Analyze and describe the operation of compander circuits.
03.08 Describe and analyze the operation of a sample and hold circuit.
03.09 Describe the conversion of analog signals into a digital format.
03.10 Describe and analyze the operation of Pulse Code Modulation (PCM) circuits.
03.11 Describe, analyze and evaluate the operation of a Coder/Decoder (CODEC) IC circuit.
03.12 Describe, analyze and evaluate the operation of a continuously variable slope delta modulation circuit.

04.0 Demonstrate proficiency in the analysis of transmission and distribution systems--The student will be able to:
04.01 Analyze and demonstrate the application of optical electronic devices in power control circuits and in analog, digital and data communication circuits.
04.02 Analyze and demonstrate the operation of optical devices.
04.03 Splice and terminate cabling systems.
04.04 Test and evaluate modulators and demodulators.
04.05 Analyze and demonstrate multiplex transmission including use of full and half duplex communications.
04.06 Describe gain and loss concepts as applied to transmission and distribution systems.
04.07 Describe the fundamental concepts of satellite communications.
04.08 Operate satellite communication systems.
04.09 Operate multiplexed data telemetry systems.
04.10 Analyze the theoretical concepts that define antenna equivalent circuits and couplers.
04.11 Perform and analyze the calculations required to evaluate the effectiveness of antennas.

05.0 Demonstrate proficiency in network communications--The student will be able to:
05.01 Describe the layers of a communications system.

05.02 Describe the protocol requirements necessary to ensure the transmission of a data message.
05.03 Describe, from a system standpoint, the characteristics of serial communications standards.
05.04 Analyze and troubleshoot communications between computers.
05.05 Compare serial communications with parallel and other standards.
05.06 Describe, analyze, troubleshoot and demonstrate the operation of network access devices.
05.07 Demonstrate use of network management system.
05.08 Identify the capabilities of a telephone circuit on a data communications system.
05.09 Describe LAN topologies as applied to data networks.
05.10 Design, connect and troubleshoot a Local Area Network (LAN).
05.11 Describe WAN topologies as applied to data networks.
05.12 Design, connect and troubleshoot a Wide Area Network (WAN).
05.13 Describe wireless topologies as applied to data networks.
05.14 Design, connect and troubleshoot a wireless network.
05.15 Fabricate and test LAN cabling.
05.16 Describe the operation of a short-range wireless network (i.e. Blue Tooth, IEEE802.11).
05.17 Describe the operation of a long-range wireless network (i.e. PCS, digital messaging, 3G Technology).
05.18 Describe the operation of a cellular communications network.
05.19 Describe and analyze error detection and correction methods used in data communication systems.
05.20 Describe basic data firewalls, encryption and decryption methods.
05.21 Demonstrate understanding of compression and decompression.
05.22 Describe the general characteristics and operations of frame relay, DSL, and ISDN as they apply to data networks.
05.23 Describe the characteristics of frame relay network management.
05.24 Describe the general characteristics and operations of routers and switches as they apply to data networks and systems.
05.25 Describe the general characteristics and design capabilities of the T-carrier system.
05.26 Analyze the network design criteria of T-1 systems.
05.27 Describe the general characteristics and design capabilities of the Synchronous Optical Network (SONET).
05.28 Describe the characteristics and design capabilities of the Asynchronous Transfer Mode (ATM) network.
05.29 Describe the characteristics of high-speed public data networks.
05.30 Apply the theory of wide area network design to systems.

06.0 Demonstrate proficiency in the analysis of telephony communication systems--The student will be able to:

06.01 Describe the general characteristics of a telephone subscriber loop.
06.02 Describe, demonstrate and analyze the operation of tone dialing, DTMF (Dual Tone Multi Frequency), pulse dialing and ringing circuits.
06.03 Describe, evaluate and analyze the operation of a MODEM in the originate and answer mode.
06.04 Describe the various functions of a BORSCHT (Battery Overload Ring Supervision Coding Hybrid Test) circuit.

06.05 Describe, evaluate and analyze the operation of a Subscriber Loop Interface Circuit (SLIC).
06.06 Describe, evaluate and analyze the operation of a Time-Slot Assignment Circuit (TSAC).
06.07 Describe and evaluate the application of fiber optic systems to telecommunications.
06.08 Analyze and describe applications of speech synthesis and recognition circuits to telecommunications.
06.09 Terminate and test telephony cable.
06.10 Describe the operation of an integrated voice and data system.

07.0 Demonstrate proficiency in the analysis of analog and digital video systems--The student will be able to:

07.01 Describe the fundamental principles and concepts of television/video systems.
07.02 Describe the operation of the key components of a television/video system.
07.03 Describe the principles of NTSC and HDTV video signals.
07.04 Analyze and describe the operation of the various sections of a DTV transmitter.
07.05 Analyze and describe the characteristics of the television signal (analog, digital, RF).
07.06 Describe and analyze the operation of the various sections of an NTSC and DTV receiver.
07.07 Analyze and describe the operation of encoders and decoders.
07.08 Assemble and test cables and connectors related to video/audio systems.
07.09 Demonstrate proficiency in the use of video and audio test equipment.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Cable Installation**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0615.030304
Program Type	College Credit Certificate (CCC)
Program Length	12 Credit Hours
CTSO	49-2094
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This program is designed to prepare students for employment as a cable installer, cable tester, cable technician, or to provide supplemental training to persons previously or currently employed in these occupations. This specialization content includes, but is not limited to, basic electronics skills, transmission and distribution systems, cabling, and network communications.

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Electronic laboratory activities are an integral part of this program. The tools, test equipment, materials and processes used in this laboratory are similar to those used in industry. Students should be able to use the various types of precision test equipment found in general use throughout the electronics industry for the purpose of analyzing, troubleshooting and repairing electronic circuitry.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate knowledge of basic electronics.
02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems.
04.0 Demonstrate proficiency in the analysis of transmission and distribution systems.
05.0 Demonstrate proficiency in network communications.
06.0 Demonstrate proficiency in the analysis of telephony communication systems.
07.0 Demonstrate proficiency in the analysis of analog and digital video systems.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Cable Installation**
CIP Number:	**0615.030304**
Program Length:	**12 Credit Hours**
SOC Code(s):	**49-2094**

This certificate program is part of the Telecommunication Engineering Technology AAS/AS degree program (0615030302). At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic electronics --The student will be able to:
- 01.01 Perform various types of soldering.
- 01.02 Perform various types of wiring and cable terminations.
- 01.03 Demonstrate knowledge of AC/DC concepts and applications.
- 01.04 Demonstrate knowledge of computer systems and basic applications.
- 01.05 Demonstrate use of basic test and measurement equipment.
- 01.06 Understand and demonstrate safety rules.
- 01.07 Demonstrate understanding of digital fundamentals.

02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems --The student will be able to:
- 02.15 Calculate transmission line characteristics and understand impedance matching.
- 02.17 Test, set up and adjust antenna systems using a power meter, network analyzer, and SWR meter.

04.0 Demonstrate proficiency in the analysis of transmission and distribution systems --The student will be able to:
- 04.02 Analyze and demonstrate the operation of optical devices.
- 04.03 Splice and terminate cabling systems.
- 04.05 Analyze and demonstrate multiplex transmission including use of full and half duplex communications.
- 04.06 Describe gain and loss concepts as applied to transmission and distribution systems.

05.0 Demonstrate proficiency in network communication The student will be able to:
- 05.15 Fabricate and test LAN cabling.

06.0 Demonstrate proficiency in the analysis of telephony communication systems --The student will be able to:
- 06.01 Describe the general characteristics of a telephone subscriber loop.
- 06.09 Terminate and test telephony cable.

07.0 Demonstrate proficiency in the analysis of analog and digital video systems --The student will be able to:
- 07.08 Assemble and test cables and connectors related to video/audio systems.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Television System Support**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0615.030305
Program Type	College Credit Certificate (CCC)
Program Length	24 Credit Hours
CTSO	27-4099
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This program is designed to prepare students for employment as a master control operator, senior cable installer, field service specialist, or to provide supplemental training to persons previously or currently employed in these occupations. This specialization content includes, but is not limited to, basic electronics skills, transmitters and receivers, transmission and distribution systems, cabling, and analog and digital video systems.

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Electronic laboratory activities are an integral part of this program. The tools, test equipment, materials and processes used in this laboratory are similar to those used in industry. Students should be able to use the various types of precision test equipment found in general use throughout the electronics industry for the purpose of analyzing, troubleshooting and repairing electronic circuitry.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate knowledge of basic electronics.
02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems.
04.0 Demonstrate proficiency in the analysis of transmission and distribution systems.
05.0 Demonstrate proficiency in network communications.
06.0 Demonstrate proficiency in the analysis of telephony communication systems.
07.0 Demonstrate proficiency in the analysis of analog and digital video systems.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Television System Support**
CIP Number: **0615.030305**
Program Length: **24 Credit Hours**
SOC Code(s): **27-4099**

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302). At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic electronics --The student will be able to:
  01.01 Perform various types of soldering.
  01.02 Perform various types of wiring and cable terminations.
  01.03 Demonstrate knowledge of AC/DC concepts and applications.
  01.04 Demonstrate knowledge of computer systems and basic applications.
  01.05 Demonstrate use of basic test and measurement equipment.
  01.06 Understand and demonstrate safety rules.
  01.07 Demonstrate understanding of digital fundamentals.

02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems --The student will be able to:
  02.15 Calculate transmission line characteristics and understand impedance matching.
  02.17 Test, set up and adjust antenna systems using a power meter, network analyzer, and SWR meter.
  02.18 Describe government rules, regulations, and permits.

04.0 Demonstrate proficiency in the analysis of transmission and distribution systems --The student will be able to:
  04.02 Analyze and demonstrate the operation of optical devices.
  04.03 Splice and terminate cabling systems.
  04.05 Analyze and demonstrate multiplex transmission including use of full and half duplex communications.
  04.06 Describe gain and loss concepts as applied to transmission and distribution systems.
  04.08 Operate satellite communication systems.

05.0 Demonstrate proficiency in network communication -The student will be able to:
  05.15 Fabricate and test LAN cabling.

06.0 Demonstrate proficiency in the analysis of telephony cabling equipment --The student will be able to:
  06.01 Describe the general characteristics of a telephone subscriber loop.
  06.09 Terminate and test telephony cable.

07.0 Demonstrate proficiency in the analysis of analog and digital video systems --The student will be able to:
  07.01 Describe the fundamental principles and concepts of television/video systems.
  07.02 Describe the operation of the key components of a television/video system.
  07.04 Analyze and describe the operation of the various sections of a DTV transmitter.

07.05 Analyze and describe the characteristics of the television signal (analog, digital, RF).
07.08 Assemble and test cables and connectors related to video/audio systems.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Network Communications (LAN)**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0615.030306
Program Type	College Credit Certificate (CCC)
Program Length	18 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	15-1071.00
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This program is designed to prepare students for employment as a network support technician, telecommunications technician, field support engineer, sub-system specialist, communications specialist, or to provide supplemental training to persons previously or currently employed in these occupations.

This specialization content includes, but is not limited to, basic electronics skills, telephony cabling and network communications.

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Electronic laboratory activities are an integral part of this program. The tools, test equipment, materials and processes used in this laboratory are similar to those used in industry. Students should be able to use the various types of precision test equipment found in general use throughout the electronics industry for the purpose of analyzing, troubleshooting and repairing electronic circuitry.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate knowledge of basic electronics.
05.0 Demonstrate proficiency in network communications.
06.0 Demonstrate proficiency in the analysis of telephony communication systems.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Network Communications (LAN)**
CIP Number: **0615030306**
Program Length: **18 Credit Hours**
SOC Code(s): **15-1071.00**

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302). At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic electronics --The student will be able to:
  01.01 Perform various types of soldering.
  01.02 Perform various types of wiring and cable terminations.
  01.03 Demonstrate knowledge of AC/DC concepts and applications.
  01.04 Demonstrate knowledge of computer systems and basic applications.
  01.05 Demonstrate use of basic test and measurement equipment.
  01.06 Understand and demonstrate safety rules.
  01.07 Demonstrate understanding of digital fundamentals.

05.0 Demonstrate proficiency in network communication -The student will be able to:
  05.01 Describe the layers of a communications system.
  05.02 Describe the protocol requirements necessary to ensure the transmission of a data message.
  05.03 Describe, from a system standpoint, the characteristics of serial communications standards.
  05.04 Analyze and troubleshoot communications between computers.
  05.05 Compare serial communications with parallel and others.
  05.06 Describe, analyze, troubleshoot and demonstrate the operation of network access devices.
  05.07 Demonstrate use of network management system.
  05.08 Identify the capabilities of a telephone circuit on a data communications system.
  05.09 Describe LAN topologies as applied to data networks.
  05.10 Design, connect and troubleshoot a Local Area Network (LAN).
  05.15 Fabricate and test LAN cabling.
  05.20 Describe basic data firewalls, encryption and decryption methods.
  05.22 Describe the general characteristics and operations of frame relay, DSL, and ISDN as they apply to data networks.
  05.24 Describe the general characteristics and operations of routers and switches as they apply to data networks and systems.

06.0 Demonstrate proficiency in the analysis of telephony cabling equipment --The student will be able to:
  06.01 Describe the general characteristics of a telephone subscriber loop.
  06.03 Describe, evaluate and analyze the operation of a MODEM in the originate and answer mode.
  06.04 Describe the various functions of a BORSCHT (Battery Overload Ring Supervision Coding Hybrid Test) circuit.
  06.07 Describe and evaluate the application of fiber optic systems to telecommunications.

06.10 Describe the operation of an integrated voice and data system.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Network Communications (WAN)**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0615.030307
Program Type	College Credit Certificate (CCC)
Program Length	18 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	15-1071.00
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This program is designed to prepare students for employment as a WAN support specialist, network designer, WAN technician, network support technician, field support engineer, or to provide supplemental training to persons previously or currently employed in these occupations. This specialization content includes, but is not limited to, basic electronics skills, telephony cabling and network communications

This specialization content includes, but is not limited to, basic electronics skills, telephony cabling and network communications.

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate knowledge of basic electronics.
05.0 Demonstrate proficiency in network communications.
06.0 Demonstrate proficiency in the analysis of telephony communication systems.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Network Communications (WAN)**
CIP Number: **0615030307**
Program Length: **18 Credit Hours**
SOC Code(s): **15-1071.00**

This certificate program is part of the Telecommunication Engineering Technology AS/AAS/AS degree program (0615030302). At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic electronics --The student will be able to:
- 01.01 Perform various types of soldering.
- 01.02 Perform various types of wiring and cable terminations.
- 01.03 Demonstrate knowledge of AC/DC concepts and applications.
- 01.04 Demonstrate knowledge of computer systems and basic applications.
- 01.05 Demonstrate use of basic test and measurement equipment.
- 01.06 Understand and demonstrate safety rules.
- 01.07 Demonstrate understanding of digital fundamentals.

05.0 Demonstrate proficiency in network communication -The student will be able to:
- 05.01 Describe the layers of a communications system.
- 05.02 Describe the protocol requirements necessary to ensure the transmission of a data message.
- 05.03 Describe, from a system standpoint, the characteristics of serial communications standards.
- 05.04 Analyze and troubleshoot communications between computers.
- 05.05 Compare serial communications with parallel and others.
- 05.06 Describe, analyze, troubleshoot and demonstrate the operation of network access devices.
- 05.07 Demonstrate use of network management system.
- 05.08 Identify the capabilities of a telephone circuit on a data communications system.
- 05.11 Describe WAN topologies as applied to data networks.
- 05.20 Describe basic data firewalls, encryption and decryption methods.
- 05.22 Describe the general characteristics and operations of frame relay, DSL, and ISDN as they apply to data networks.
- 05.23 Describe the characteristics of frame relay network management.
- 05.24 Describe the general characteristics and operations of routers and switches as they apply to data networks and systems.
- 05.25 Describe the general characteristics and design capabilities of the T-carrier system.
- 05.26 Analyze the network design criteria of T-1 systems.
- 05.27 Describe the general characteristics and design capabilities of the Synchronous Optical Network (SONET).
- 05.28 Describe the characteristics of the Asynchronous Transfer Mode (ATM) network.
- 05.29 Describe the characteristics of high-speed public data networks.
- 05.30 Apply the theory of wide area network design to systems.

06.0 Demonstrate proficiency in the analysis of telephony cabling equipment --The student will be able to:

06.01 Describe the general characteristics of a telephone subscriber loop.
06.03 Describe, and analyze the operation of a MODEM in the originate and answer mode.
06.04 Describe the various functions of a BORSCHT (Battery Overload Ring Supervision Coding Hybrid Test) circuit.
06.10 Describe the operation of an integrated voice and data system.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Wireless Communications**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0615030308
Program Type	College Credit Certificate (CCC)
Program Length	18 Credit Hours
CTSO	15-1071
SOC Codes (all applicable)	SkillsUSA
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This program is designed to prepare students for employment as a wireless installer, wireless technician, wireless field service technician, or to provide supplemental training to persons previously or currently employed in these occupations.

This specialization content includes, but is not limited to, basic electronics skills, transmission and distribution systems, telephony communication systems, digital communications, data communications and network communications.

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Electronic laboratory activities are an integral part of this program. The tools, test equipment, materials and processes used in this laboratory are similar to hose used in industry. Students should be able to use the various types of precision test equipment found in general use throughout the electronics industry for the purpose of analyzing, troubleshooting and repairing electronic circuitry.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate knowledge of basic electronics.
02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems.
03.0 Demonstrate proficiency in design and analysis of digital communications systems.
04.0 Demonstrate proficiency in the analysis of transmission and distribution systems.
05.0 Demonstrate proficiency in network communications.
06.0 Demonstrate proficiency in the analysis of telephony communication systems.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Wireless Communications**
CIP Number: **0615030308**
Program Length: **18 Credit Hours**
SOC Code(s): **15-1071**

This certificate program is part of the Telecommunication Engineering Technology AS/AAS degree program (0615030302). At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic electronics --The student will be able to:
- 01.01 Perform various types of soldering.
- 01.02 Perform various types of wiring and cable terminations.
- 01.03 Demonstrate knowledge of AC/DC concepts and applications.
- 01.04 Demonstrate knowledge of computer systems and basic applications.
- 01.05 Demonstrate use of basic test and measurement equipment.
- 01.06 Understand and demonstrate safety rules.
- 01.07 Demonstrate understanding of digital fundamentals.

02.0 Demonstrate proficiency in basic operation and application of transmitters, receivers, and transmission and distribution systems --The student will be able to:
- 02.01 Describe the principles and operation of amplitude modulation and frequency modulation.
- 02.02 Demonstrate an understanding of block diagrams and components of transmitter receiver circuits including mixers, IF amplifiers, local oscillators, modulators and demodulators.
- 02.03 Identify, measure, analyze and troubleshoot AM and FM transmitter/receiver circuits including mixers, IF amplifiers, local oscillators, modulators, demodulators and speech amplifiers.
- 02.04 Analyze, troubleshoot, and maintain transmitters and receivers, to include hetrodyning, frequency synthesis, phase-locked-loop, filtering and automatic control circuits.
- 02.14 Describe the components and concepts of transmission systems: antennas, fiber optics, coax, copper, microwave, satellite, feed lines, and wave guides.
- 02.15 Calculate transmission line characteristics and understand impedance matching.
- 02.16 Analyze and describe the concepts of radio wave propagation and radiation fields.
- 02.17 Test, set up and adjust antenna systems using a power meter, network analyzer, and SWR meter.
- 02.18 Describe government rules, regulations, and permits.

03.0 Demonstrate proficiency in design and analysis of digital communications systems --The student will be able to:
- 03.02 Describe industry standards in digital communications.

04.0 Demonstrate proficiency in the analysis of transmission and distribution systems --The student will be able to:
- 04.03 Splice and terminate cabling systems.

- 04.06 Describe gain and loss concepts as applied to transmission and distribution systems.

05.0 Demonstrate proficiency in network communication --The student will be able to:

- 05.01 Describe the layers of a communications system.
- 05.02 Describe the protocol requirements necessary to ensure the transmission of a data message.
- 05.06 Describe, analyze, troubleshoot and demonstrate the operation of network access devices.
- 05.13 Describe wireless topologies as applied to data networks.
- 05.14 Design, connect and troubleshoot a wireless network.
- 05.16 Describe the operation of a short-range wireless network (i.e. Blue Tooth, IEEE 802.11).
- 05.17 Describe the operation of a long-range wireless network (i.e. PCS, digital messaging, 3G Technology).
- 05.18 Describe the operation of a cellular communications network.
- 05.19 Describe and analyze error detection and correction methods used in data communication systems.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Technical Writing – Publications Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1623110100	0623110100
Program Type	College Credit	College Credit
Standard Length	65 Credit Hours	65 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-3042	27-3042
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare students for initial employment with occupational titles as technical publications writers, or to provide supplemental training for persons previously or currently employed in these occupations.

The content should include, but not be limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, and revising, editing, and writing materials for technical and administrative publications concerned with work methods and procedures, and installation, operation, and maintenance of machinery and other equipment.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Technical Writing - Publications industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 65 hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education

coursework according to SACS. The standard length of this program is 65 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate understanding of procedures.
02.0 Develop and write material.
03.0 Edit technical material.
04.0 Perform research.
05.0 Interpret blueprints and schematics.
06.0 Revise printed materials.
07.0 Lay out work to be printed.
08.0 Demonstrate appropriate communication skills.
09.0 Demonstrate appropriate math skills.
10.0 Demonstrate appropriate understanding of basic science.
11.0 Demonstrate employability skills.
12.0 Demonstrate an understanding of entrepreneurship

2011-2012

Florida Department of Education
Student Performance Standards

Program Title:	**Technical Writing - Publications Technology**
CIP Numbers:	**0623.110100 AAS** **1623110100 AS**
Program Length:	**65 Credit Hours**
SOC Code(s):	**27-3042**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Demonstrate understanding of procedures--The student will be able to:
- 01.01 Apply school and class rules and procedures.
- 01.02 Apply rules and procedures used in business and industry for the occupation.

02.0 Develop and write materials--The student will be able to:
- 02.01 Apply rules of grammar and word usage.
- 02.02 Use sentences and paragraphs effectively.
- 02.03 Spell words correctly.
- 02.04 Write paragraphs exemplifying the qualities of unity and coherence, and using emphasis effectively.
- 02.05 Identify the need for a publication.
- 02.06 Define the audience to read a publication.
- 02.07 Select and rank the topics as appropriate.
- 02.08 Define the scope of the publication.
- 02.09 Develop the time frame for development.
- 02.10 Prepare a budget as necessary.
- 02.11 Apply standards.
- 02.12 Review existing literature.
- 02.13 Determine and consider resources.
- 02.14 Coordinate the project by maintaining monitoring, and reporting progress.
- 02.15 Schedule editorial and support services.
- 02.16 Choose vendors.
- 02.17 Receive and file source data.
- 02.18 Develop, revise, and edit drafts.
- 02.19 Group information into working units.
- 02.20 Prepare and revise an outline.
- 02.21 Utilize word processing system.
- 02.22 Develop a format for a publication.
- 02.23 Define and standardize terminology.
- 02.24 Comply with standards and specifications.
- 02.25 Match the level of vocabulary with the targeted audience.
- 02.26 Make notes for illustrations.
- 02.27 Specify types and styles for illustrations.
- 02.28 Prepare sketches as needed.
- 02.29 Write figures titles and photograph captions.
- 02.30 Prepare tables and charts.

02.31 Provide artists with source data.

03.0 Edit technical material--The student will be able to:
03.01 Evaluate material for readability and correctness.
03.02 Validate the data.
03.03 Validate the data in illustrations.
03.04 Review and edit illustrations.
03.05 Conduct meetings for feedback, conflict resolution, and evaluation of suggested changes.

04.0 Perform research--The student will be able to:
04.01 Interview sources of information.
04.02 Study relevant literature.
04.03 Participate in hands-on experiences, if applicable.
04.04 Observe or walk through the process(es).
04.05 Use and evaluate models.
04.06 Simulate audience's situation.

05.0 Interpret blueprints and schematics--The student will be able to:
05.01 Apply math skills.
05.02 Read scales and measuring instruments.
05.03 Read and interpret multi-view drawings.
05.04 Read and interpret section views and details.
05.05 Read and interpret auxiliary views.
05.06 Read and interpret types of dimensions.
05.07 Read and interpret pictorial drawings.
05.08 Read and interpret supplementary information.
05.09 Read and interpret removable fastener drawings.
05.10 Read and interpret welding drawings.
05.11 Read and interpret geometric tolerances.
05.12 Read and interpret cam drawings.
05.13 Read and interpret gear drawings.
05.14 Read and interpret assembly and subassembly drawings.
05.15 Read and interpret detail drawings.
05.16 Read and interpret surface developments.
05.17 Read and interpret bearing drawings.
05.18 Read and interpret spring drawings.
05.19 Read and interpret casting drawings.
05.20 Read and interpret forging drawings.
05.21 Read and interpret tool drawings.
05.22 Read and interpret stamping drawings.
05.23 Read and interpret numerical control drawings.
05.24 Read and interpret computer aided drawings.
05.25 Read and interpret plot plans.
05.26 Read and interpret foundation plan drawings.
05.27 Read and interpret floor plan drawings.
05.28 Read and interpret elevation drawings.
05.29 Read and interpret schedules.
05.30 Read and interpret stair details.
05.31 Read and interpret fireplace details.
05.32 Read and interpret truss drawings.

05.33 Read and interpret roof framing plans.
05.34 Read and interpret electrical plans.
05.35 Read and interpret plumbing drawings.
05.36 Read and interpret heating/cooling plans.
05.37 Read and interpret landscape layout drawings.
05.38 Read and interpret specifications.
05.39 Read and interpret erection plans.
05.40 Read and interpret structural steel design drawings.
05.41 Read and interpret structural steel drawings.
05.42 Read and interpret concrete engineering drawings.
05.43 Read and interpret placing drawings.
05.44 Read and interpret schematic drawings.
05.45 Read and interpret printed circuit board drawings.
05.46 Read and interpret package drawings.
05.47 Read and interpret connection drawings.
05.48 Read and interpret interconnection drawings.
05.49 Read and interpret wiring lists.
05.50 Read and interpret cable drawings.
05.51 Read and interpret harness drawings.
05.52 Read and interpret component drawings.
05.53 Read and interpret logic diagrams.
05.54 Read and interpret block diagrams.
05.55 Read and interpret cutaway diagrams.
05.56 Read and interpret graphic diagrams.
05.57 Read and interpret combination diagrams.
05.58 Read and interpret traverse drawings.
05.59 Read and interpret plat drawings.
05.60 Read and interpret street layout drawings.
05.61 Read and interpret map drawings.
05.62 Read and interpret topographic drawings.
05.63 Identify construction codes and standards.
05.64 Identify mechanical standards.
05.65 Identify electronic standards.

06.0 Revise printed materials--The student will be able to:
06.01 Determine the requirements of the job.
06.02 Estimate the time to complete the job.
06.03 Calculate costs.
06.04 Make changes and rewrite the draft in the required format.

07.0 Lay out work to be printed--The student will be able to:
07.01 Specify typography.
07.02 Prepare dummy copy.
07.03 Paginate the text.
07.04 Paste-up camera-ready copy.
07.05 Make Photostats of art (i.e., PMT, Velox, Photostat).
07.06 Crop and size illustrations.
07.07 Strip and opaque negatives.
07.08 Proofread copy at each stage of production.
07.09 Secure final approvals.
07.10 Prepare a printer's dummy or approval copy.

07.11 Secure estimates from printers.
07.12 Evaluate estimates and prepare a contract.
07.13 Send camera-ready copy to the printer.
07.14 Secure and inspect negatives.
07.15 Inspect printer's work (blue lines, press proofs, or first page).
07.16 Solve problems with the printer.
07.17 Receive, check, and approve for payment the shipment from a printer.
07.18 Coordinate the distribution of print material.

08.0 Demonstrate appropriate communication skills--The student will be able to:
08.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
08.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
08.03 Read and follow written and oral instructions.
08.04 Answer and ask questions coherently and concisely.
08.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
08.06 Demonstrate appropriate telephone/communication skills.

09.0 Demonstrate appropriate math skills--The student will be able to:
09.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
09.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
09.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
09.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
09.05 Demonstrate an understanding of federal, state and local taxes and their computation.

10.0 Demonstrate appropriate understanding of basic science--The student will be able to:
10.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
10.02 Draw conclusions or make inferences from data.
10.03 Identify health related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
10.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

11.0 Demonstrate employability skills--The student will be able to:
11.01 Conduct a job search.
11.02 Secure information about a job.
11.03 Identify documents which may be required when applying for a job interview.
11.04 Complete a job application form correctly.
11.05 Demonstrate competence in job interview techniques.
11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
11.07 Identify acceptable work habits.
11.08 Demonstrate knowledge of how to make job changes appropriately.
11.09 Demonstrate acceptable employee health habits.

11.10 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.

12.0 Demonstrate an understanding of entrepreneurship--The student will be able to:

12.01 Define entrepreneurship.
12.02 Describe the importance of entrepreneurship to the American economy.
12.03 List the advantages and disadvantages of business ownership.
12.04 Identify the risks involved in ownership of a business.
12.05 Identify the necessary personal characteristics of a successful entrepreneur.
12.06 Identify the business skills needed to operate a small business efficiently and effectively.

2011 – 2012

Florida Department of Education
Curriculum Framework

Program Title: **Graphics Technology**
Career Cluster: **Arts, A/V Technology & Communications**

	AS	AAS
CIP Number	1650.040200	0650.040200
Program Type	College Credit	College Credit
Standard Length	64 credit hours	64 credit hours
CTSO	Phi Beta Lambda, BPA (Business Professionals of America)	Phi Beta Lambda, BPA (Business Professionals of America)
SOC Codes (all applicable)		
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as Broadcast Designer, Production Artist, Illustrator, Desktop Publisher, Graphic Designer, Production Manager, Presentation Specialist, or Web Designer in the Arts, A/V Technology & Communications career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to communication skills, team skills, human relations and employability skills, safe and efficient work practices, illustration, style/technique medium, concept formulation, design, drawing, display/exhibit design, layout, production skills, printing processes, use of industry tools and equipment, use and care of materials, use of current industry standards/ practices/techniques, typography, photographic procedures, color theorem, marketing/advertising theorem, T.V. graphics, electronic content, and portfolio development.

Programs may include specialization areas such as: animation, interactive/ multimedia design, graphic arts, graphic design, environmental graphics, motion graphics, or 3-D.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Cooperative Training: Cooperative training is appropriate for this program but is not required. Whenever offered, the rules, guidelines, and requirements specified in the Florida Department of Education Cooperative Education Manual apply.

Career and Technical Student Organization (CTSO)

Phi Beta Lambda and BPA are the appropriate career and technical student organizations for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).This AS/AAS degree program includes the following College Credit Certificates:

Graphic Design Support (0650.040202) – 15 credit hours

Interactive Media Support (0650.040203) – 15 credit hours
Graphic Design Production (0650.040204) – 24 credit hours
Interactive Media Production (0650.040205) – 24 credit hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate effective communication skills.
02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
04.0 Perform illustration.
05.0 Formulate concepts/theory.
06.0 Apply design theories.
07.0 Demonstrate drawing techniques.
08.0 Demonstrate creative use of typography.
09.0 Create exhibit/display designs.
10.0 Create advertising layouts.
11.0 Demonstrate production skills.
12.0 Interpret printing processes.
13.0 Demonstrate knowledge of current industry standards, practices, and techniques.
14.0 Interpret photographic procedures.
15.0 Apply marketing/advertising principles.
16.0 Apply color theories.
17.0 Demonstrate industry level presentation procedures
18.0 Design television graphics.
19.0 Utilize computer hardware, software, networks and peripherals for the production of electronic content.
20.0 Create electronic content.
21.0 Demonstrate appropriate math skills.
22.0 Demonstrate appropriate understanding of basic science.
23.0 Demonstrate employability skills.
24.0 Demonstrate an understanding of entrepreneurship.

2011 – 2012

Florida Department of Education
Student Performance Standards

Program Title: **Graphics Technology**
CIP Numbers: **1650.040200 AS, 0650.040200 AAS**
Program Length: **64 credit hours**
SOC Code(s):

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Demonstrate effective communication skills--The student will be able to:

01.01 Demonstrate presentation skills.
01.02 Prepare written correspondence.
01.03 Demonstrate effective oral communication skills.
01.04 Read and interpret written and oral instructions.

02.0 Demonstrate team skills--The student will be able to:

02.01 Demonstrate project management abilities.
02.02 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:

03.01 Follow industry rules, safety regulations and policies.
03.02 Demonstrate proper use of toxic materials.
03.03 Demonstrate awareness of appropriate ergonomics.
03.04 Demonstrate proper care of equipment.
03.05 Demonstrate typical workplace tasks in a timely manner.

04.0 Perform illustration--The student will be able to:

04.01 Demonstrate versatile illustration styles and techniques.
04.02 Demonstrate knowledge of methods and materials.
04.03 Create computer illustrations.
04.04 Identify recognized illustrators and renowned works.

05.0 Formulate concept/theory--The student will be able to:

05.01 Select appropriate style or technique to problem solving.
05.02 Display creative talent and ingenuity.
05.03 Apply principles of design.
05.04 Demonstrate the design process.

06.0 Apply design theories--The student will be able to:

06.01 Create a design in black and white and colors.

06.02 Create various mockups, dummies, and comprehensive layouts in a variety of formats.
06.03 Evaluate use of design principles utilized in various graphic design applications.

07.0 Demonstrate drawing techniques--The student will be able to:

07.01 Draw three dimensional shapes.
07.02 Draw still life.
07.03 Draw figures.
07.04 Demonstrate use of perspective.
07.05 Identify artwork and artists of historical significance.

08.0 Demonstrate creative uses of typography--The student will be able to:

08.01 Develop appropriate use of type styles and letter forms.
08.02 Demonstrate application of typographical specifications.
08.03 Apply type construction design.
08.04 Apply proper letters and line spaces for typesetting.
08.05 Develop working knowledge of typespacing.
08.06 Demonstrate principles of typography in design project.
08.07 Utilize a desktop computer and industry standard software for type production.

09.0 Create exhibit/display designs--The student will be able to:

09.01 Apply 2D or 3D design principles.
09.02 Construct scale models.
09.03 Indicate proper specifications for design.
09.04 Coordinate production of displays and exhibits.

10.0 Create advertising layouts--The student will be able to:

10.01 Identify advertising needs and develop appropriate solution.
10.02 Produce comprehensive layouts for advertising in newspaper, advertising, magazines, billboards, and an advertising campaign.

11.0 Demonstrate production skills--The student will be able to:

11.01 Size photographs and illustrations.
11.02 Demonstrate correct preparation of electronic files.
11.03 Demonstrate knowledge of traditional (non-electronic) production techniques.

12.0 Interpret printing processes--The student will be able to:

12.01 Determine methods of printing and specialty printing methods.
12.02 Select appropriate substrates and inks for projects.
12.03 Explain color separation process.
12.04 Identify and specify half-tone and line negatives.
12.05 Interpret signature and imposition procedures.
12.06 Analyze and identify method of proofing.
12.07 Explain basic print process.

13.0 Demonstrate knowledge of current industry standards, practices, and techniques--The student will be able to:

13.01 Explain copyright procedures.
13.02 Use industry terminology.
13.03 Identify industry practice and procedures.
13.04 Explain importance of meeting deadlines.
13.05 Acquire up-to-date in-field technology.
13.06 Learn how to cope with stress.
13.07 Adjust to work conditions.

14.0 Interpret photographic procedures--The student will be able to:

14.01 Describe how to coordinate photographic procedures with photographer.
14.02 Perform cropping and scaling.
14.03 Demonstrate understanding of photographic terminology.
14.04 Operate camera.
14.05 Create an artistic photographic image.

15.0 Apply marketing/advertising principles--The student will be able to:

15.01 Apply marketing/advertising principles.
15.02 Identify customer needs.
15.03 Identify target market.
15.04 Prepare cost estimate.
15.05 Analyze marketing potential.
15.06 Recognize proper use of specialty services (supplies, specialties).
15.07 Identify client marketing objective.
15.08 Identify client advertising objective.
15.09 Understand an advertising agency’s structure and procedures.

16.0 Apply color theories--The student will be able to:

16.01 Apply knowledge of color theory.
16.02 Demonstrate knowledge of industry standard color systems.

17.0 Demonstrate industry level presentation procedures--The student will be able to:

17.01 Demonstrate mounting and matting procedure.
17.02 Demonstrate industry presentation procedure and techniques.
17.03 Prepare industry level portfolio.

18.0 Design television graphics--The student will be able to:

18.01 Produce T.V. storyboards.
18.02 Design graphics for broadcast.

19.0 Utilize computer hardware, software, networks, and peripherals for the production of electronic content--The student will be able to:

19.01 Demonstrate understanding of various platforms, operating systems, hardware, software, peripherals, network issues, and compatibility.

20.0 Create electronic content--The student will be able to:

20.01 Use vector based, bitmap and page layout computer application software.
20.02 Create web design.

21.0 Demonstrate appropriate math skills--The student will be able to:

21.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
21.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
21.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
21.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
21.05 Demonstrate an understanding of federal, state and local taxes and their computation.

22.0 Demonstrate appropriate understanding of basic science--The student will be able to:

22.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
22.02 Draw conclusions or make inferences from data.
22.03 Identify health related problems that may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
22.04 Understand pressure measurement in terms of P.S.I., inches of mercury, and K.P.A.

23.0 Demonstrate employability skills--The student will be able to:

23.01 Create a résumé.
23.02 Conduct a job search.
23.03 Secure information about a job.
23.04 Identify documents that may be required when applying for a job interview.
23.05 Complete a job application form correctly.
23.06 Demonstrate competence in job interview techniques.
23.07 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
23.08 Identify acceptable work habits.
23.09 Demonstrate knowledge of how to make appropriate job changes.
23.10 Demonstrate acceptable employee health habits.
23.11 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.

24.0 Demonstrate an understanding of entrepreneurship--The student will be able to:

24.01 Define entrepreneurship.
24.02 Describe the importance of entrepreneurship to the American economy.

24.03 List the advantages and disadvantages of business ownership.
24.04 Identify the risks involved in ownership of a business.
24.05 Identify the necessary personal characteristics of a successful entrepreneur.
24.06 Identify the business skills needed to operate a small business efficiently and effectively.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Graphic Arts Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1650040201	0650040201
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-1024	27-1024
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare students for employment as printing operations managers. This program also provides supplemental training for persons previously or currently employed in this occupation.

The course content will include the following: pre-press, press and post-press operations, administration, copy preparation, stripping black and white, line graphic photo processes, offset presswork, estimating, graphic arts halftone processes and color reproduction technology. The course content should also include training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Graphic Arts industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Shop or laboratory activities are an integral part of this program. These activities provide instruction in the use of tools, equipment, materials and processes found in the industry. Students are also instructed in the following: customer layouts, composition and camera ready copy; producing line negatives, halftone negatives and contacts; stripping line negatives, halftone negatives, and multicolor and process color; producing printing plates, single color proofs and color proofs; operating and adjusting duplicators; and operating cutting, folding and binding equipment.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student’s IEP or 504 plan or postsecondary student’s accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a “transfer value” assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Perform reproduction process operations.
02.0 Perform estimating operations.
03.0 Perform graphic design operations.
04.0 Perform typographical operations.
05.0 Perform copy preparation operations.
06.0 Perform line graphic photo operations.
07.0 Perform graphic arts halftone operations.
08.0 Perform color reproduction operations.
09.0 Perform stripping operations.
10.0 Perform proofing and plate-making operations.
11.0 Perform offset operations.
12.0 Perform finishing operations.
13.0 Demonstrate appropriate communication skills.
14.0 Demonstrate appropriate math skills.
15.0 Demonstrate appropriate understanding of basic science.
16.0 Demonstrate employability skills.
17.0 Demonstrate an understanding of entrepreneurship.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Graphic Arts Technology**
CIP Numbers: **0650040201 AAS**
1650040201 AS
Program Length: **64 Credit Hours**
SOC Code(s): **27-1024**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Perform reproduction process operations--The student will be able to:
- 01.01 Identify the equipment and materials used in reproduction process operations, their parts and functions and the safety rules relating to their operation.
- 01.02 Set up and operate reproduction tools and equipment.
- 01.03 Perform operator maintenance on reproduction equipment.
- 01.04 Identify and explain the scope, purpose, size and products of the graphic communications industry by identifying various statistics that relate to its existence.
- 01.05 Trace the evolution of writing, kinds of communications, materials used and printing by identifying and recalling times, cultures and specific inventions.
- 01.06 Analyze the various reproduction processing such as: letterpress, gravure, offset lithography, screen, flexography and electronic.
- 01.07 Compare and contrast the various reproduction of elements in each reproduction process to distinguish the strengths and weaknesses of each.
- 01.08 Explain the value of planning and design to the graphic communication process by identifying principles of design and the steps used in the planning of layouts.
- 01.09 Analyze the various printing surfaces by contrast and comparison to a variety of elements in each process to distinguish the difference in each surface.
- 01.10 Evaluate printing processes by judging advantages and disadvantages of each.
- 01.11 Define terms used in mark-up of copy for composition by being able to recognize marks, instructions and other data.
- 01.12 Place in sequential order the production steps of a printing job from conception to completion.
- 01.13 Define terms used in making a paste-up or mechanical.
- 01.14 Define and explain the elements of typography and their value to the printing and design process.
- 01.15 Analyze typographic terms.
- 01.16 Analyze the current systems of composition by comparison and contrast and by being able to categorize and distinguish each.
- 01.17 Define and explain the terms and methodology used in commercial and process photography as they relate to the printing processes.
- 01.18 Analyze plates used in the various printing processes.
- 01.19 Define and explain the principles and generalizations in the use of color in design of printing.
- 01.20 Define and explain the history of inks, substrates and differences between printing processes.

01.21 Define and explain the history of paper and basic components in paper by recalling items used in place of paper and identifying the steps used in the manufacture of paper.
01.22 List and explain career opportunities in printing.
01.23 Analyze the difference between artist use and production use of printing.
01.24 Set up and operate machine used in reproduction process operation in accordance with manufacturer's specifications.
01.25 Perform operator maintenance on machine used in reproduction process operation in accordance with manufacturer's specifications.

02.0 Performing estimating operations--The student will be able to:
02.01 Identify the equipment and materials used in estimating operations, their parts and functions and the safety rules relating to their operation.
02.02 Define and explain the methods of reproduction illustrated by offset and letter press.
02.03 Define and explain the organization and management of a wall organized printing company by identifying its organizational elements.
02.04 Define and explain an estimator's duties including the knowledge of categories of production pertaining to estimating.
02.05 Define and explain the role and responsibility of the estimator in a printing plant.
02.06 Define and explain the sources of information available to the estimator.
02.07 Define and explain the factors that must be considered by the estimator in preparing an estimate such as standard production times, budgeted hour cost rates, outside purchased services and material costs.
02.08 Analyze terms used in estimating.
02.09 Place in sequential order the progressive steps for preparing an estimate.
02.10 Define and explain the principle characteristics of the different papers used in the printing process.
02.11 List the job tasks that usually appear on an estimating form.
02.12 List the job tasks that usually appear on an estimating form in the sequential order in which they are usually performed.
02.13 Apply formula for computing weight of paper stock.
02.14 Define and explain basic sheet sizes by listing the paper categories with the basic sheet size for each.
02.15 Prepare costs estimates utilizing given items, costs and specifications for a one-color, one-up job.
02.16 Prepare costs estimates utilizing given items, costs and specifications for a one-color, multiple.
02.17 Prepare cost estimates utilizing given items, costs and specifications for a one-color, step job.
02.18 Prepare cost estimates utilizing given items, costs and specifications for a one-color, four-page job.
02.19 Prepare cost estimates utilizing given items, costs and specifications for a one-color, eight-page job.
02.20 Prepare cost estimates utilizing given items, costs and specifications for a one color, sixteen-page folded, saddle stitched job.

03.0 Perform graphic design operations--The student will be able to:
03.01 Identify the equipment and materials used in graphic design operations, their parts and functions and the safety rules relating to their operation.
03.02 Set up and operate graphic design operation tools and equipment.

03.03 Perform operator maintenance on graphic design operation equipment.
03.04 Prepare thumbnail layout.
03.05 Prepare rough layout.
03.06 Prepare comprehensive layout including finish working dummy.
03.07 Size and proportion photographs, line drawings and other copy elements.
03.08 Copy fit and mark up (specify type sizes and styles).

04.0 Perform typographical operations--The student will be able to:

04.01 Identify the equipment and materials used in typographical operations, their parts and functions and the safety rules relating to their operation.
04.02 Set up and operate typographical tools and equipment.
04.03 Perform operator maintenance on typographical equipment.
04.04 Define and explain typographic terms for measurement.
04.05 Set up and proofread type by a variety of means.
04.06 Analyze and solve printing measurement problems using a group of specific facts, a system of logic and arithmetic based on printer's measurements.
04.07 Set up and operate a variety of typesetting machines.
04.08 Evaluate printed typed samples for visual spacing to mechanical spacing and certain letter combinations to other letter combinations and produce examples.
04.09 Define terms used in typesetting and typography and explain the difference.
04.10 Define and explain terms that deal with type identification.
04.11 Define and explain the elements of typography and their values in printing and design.
04.12 Solve copy fitting problems by applying typographic principles.
04.13 Evaluate typesetting systems by judging their advantages and their disadvantages.
04.14 Apply the principles of several copy fitting systems for counting manuscripts by predicting keystrokes in each system.
04.15 Perform manual, automatic and semi-automatic justification decisions.

05.0 Perform copy preparation operations--The student will be able to:

05.01 Identify the equipment and materials used in copy preparation operations, their parts and functions and the safety rules relating to their operation.
05.02 Set up and operate copy preparation tools and equipment.
05.03 Perform operator maintenance on copy preparation equipment.
05.04 Define and explain the scope and purpose of copy preparation.
05.05 Define and explain terms used in copy preparation.
05.06 Define and explain career opportunities preparation.
05.07 Apply the principles of mechanical paste-up using printed type proofs.
05.08 Define, explain and demonstrate how to scale by diagonal line method.
05.09 Define, explain and demonstrate the use of the proportion wheel.
05.10 Apply the use of the proportion wheel to various copy situations.
05.11 Define, explain and demonstrate layout for mechanicals.
05.12 Define and explain the different types of light sensitive materials used on copy preparation.
05.13 Define, explain and apply the elements of mechanical masking.
05.14 Explain and demonstrate the use of a process color chart such as a Murphy color wheel when specifying color breaks.
05.15 Demonstrate the use of amberlith by cutting to the specific areas where color is to be masked in basic art drawings.
05.16 Demonstrate application of room light film materials.

05.17 Paste up mechanical elements including keyline for photographs and tint blocks; and ruling.
05.18 Prepare tissue overlay and specify color break, tint percentages, and reverses.
05.19 Check and compare completed mechanical to comprehensive layout for final proofing.

06.0 Perform line graphic photo operations--The student will be able to:

06.01 Identify the equipment and materials used in line graphic photo operations, their parts and functions and the safety rules relating to their operations.
06.02 Set up and operate line graphic photo tools and equipment.
06.03 Perform operator maintenance on line graphic photo equipment.
06.04 Analyze and solve lithographic scaling problems by analyzing facts, calculating proper sizes or percentages and stating solutions in appropriate terms.
06.05 Define and explain the photographic record.
06.06 Define and explain terms relating to film construction.
06.07 Define and explain characteristics of film relating to speed, contrast and color.
06.08 Define and explain terms relating to line photography.
06.09 Define and explain terms relating to electromagnetic energy and spectrum.
06.10 Demonstrate the application and alignment of camera planes and working parts.
06.11 Operate a process camera by making various adjustments and by making a series of negatives to produce appropriate results using a variety of photographic materials.
06.12 Demonstrate the application and limitation of the relationship between time, F-stop, exposure and light intensity by using a reflection density guide and interpreting results.
06.13 Define and explain specific terms in relation to a process camera lens.
06.14 Define and explain lens aberrations and flare.
06.15 Define and explain the law of inverse squares, law of reflection, and law of reflection of light.
06.16 Demonstrate application and limitation of the relationship between bellows extension, exposure and F-stops by using formulas, charts, diaphragm control systems and interpret results.
06.17 Demonstrate the mixing of photographic chemicals for processing of photographic materials by identifying rations, recognizing terms and different chemical and mixing them when necessary.
06.18 Operate a vacuum frame and use a variety of films, copy and procedures.
06.19 Demonstrate application and procedures to produce film negatives and positives with a variety of films, equipment and conditions.
06.20 Demonstrate the use of a reflection density guide by establishing a standard under a given set of conditions for prediction, control and standardization of results.
06.21 Demonstrate the use of a density guide and the arithmetic behind it by identifying step relationships, explaining exposure changes to steps, by being able to explain changes in density and by confirming them in laboratory practice.
06.22 Define and explain terms relating to photographic filters used in process photography.
06.23 Demonstrate the use of filters in laboratory projects.
06.24 Define and explain the need and value of establishing and maintaining standardized procedures.

07.0 Perform graphic arts halftone operations--The student will be able to:

- 07.01 Identify the equipment and materials used in graphic arts halftone operations, their parts and functions and the safety rules relating to their operation.
- 07.02 Set up and operate graphic arts halftone tools and equipment.
- 07.03 Perform operator maintenance on graphic arts halftone equipment.
- 07.04 Define halftone terminology.
- 07.05 Calibrate a reflection densitometer to manufacturer's specifications.
- 07.06 Compare and contrast the funding of the reflection densitometer with the Kodak Density Guide.
- 07.07 Solve a variety of exposure problems using an exposure computer.
- 07.08 Solve a variety of exposure problems using neutral density filters.
- 07.09 Demonstrate and explain a variety of special films such as litho pan, rapid access and room light.
- 07.10 Evaluate a typical printed halftone under normal laboratory conditions and determine the best possible exposure combination to help establish laboratory standards halftone photography.
- 07.11 Develop sets of directions for the major basics of halftone photography, basic exposure, basic density range of the contact screen, basic density of the copy, basic flash and basic material on which to print on.
- 07.12 Solve a variety of problems by applying the principles of densitometry and exposure.

08.0 Perform color reproduction operations--The student will be able to:

- 08.01 Identify the equipment and materials used in color reproduction operations, their parts and functions and the safety rules relating to their operation.
- 08.02 Set up and operate color reproduction tools and equipment.
- 08.03 Perform operator maintenance on color reproduction equipment.
- 08.04 Apply the principles of visible light by constructing a spectrograph and placing the major subdivisions of white light in their proper position according to scientific theory.
- 08.05 Define and explain the interrelationship of light and color.
- 08.06 Define and explain the principles of color theory as they apply to process printing.
- 08.07 Define and explain the difference between additive and subtractive color.
- 08.08 Define and explain the color absorption/reflection theory as it applies to process color filters and printing inks.
- 08.09 Compare and contrast color separation systems for direct, indirect and electronic scanning.
- 08.10 Interpret manufacturer's film data sheets of various applicable films.
- 08.11 Define and explain densitometry and sensitometry.
- 08.12 Apply the principles of densitometry and sensitometry to establish local laboratory standards.
- 08.13 Define and explain the requirements for photographic color separation by listing the materials, equipment, facilities and special considerations required in the process.
- 08.14 Define and explain the requirements for color production by graphing and interpreting the deficiencies of printing inks.

09.0 Perform stripping operations--The student will be able to:

- 09.01 Identify the equipment and materials used in stripping operations, their parts and functions and the safety rules relating to their operation.
- 09.02 Set up and operate stripping operations tools and equipment.
- 09.03 Perform operator maintenance on stripping operations equipment.

09.04 Define and explain terms used in stripping.
09.05 Define and explain stripping as a career opportunity.
09.06 Analyze the various approaches to stripping by comparing and contrasting pre-printed masking sheets with conventional non-printed masking sheets.
09.07 Identify the parts of a contact frame and point light source and explain their use.
09.08 Produce contacts using orthochromatic and duplicating film using transmission density guide and standard time and temperature development.
09.09 Identify equipment and materials used in the stripping function and the safety rules pertaining to each.
09.10 Apply basic principles of stripping using: T-square and triangle to align, position and tape film.
09.11 Prepare working dummy and produce a one-color, one-up layout.
09.12 Prepare working dummy and produce a one-color, multiple layout.
09.13 Define and explain methodology relating to step-and-repeat by choosing or recognizing the different procedures relating to particular situations.
09.14 Prepare working dummy and produce a one-color, step layout.
09.15 Prepare working dummy and produce a one-color, four-page layout.
09.16 Prepare working dummy and produce a one-color, eight-page layout.
09.17 Demonstrate the cutting of Rubylith masks by trapping to key line negatives.
09.18 Prepare a working dummy and apply principles of a pin-register system to produce a multiple-burn exposure layout (halftone and screen tints).
09.19 Prepare a working dummy and apply principles of a pin-register system to produce and strip a multi-flat color layout.
09.20 Produce composed film from multi-flat color layout and strip in position.
09.21 Inspect and evaluate flats to original mechanical.

10.0 Perform proofing & plate making operations--The student will be able to:
10.01 Identify the equipment and materials used in proofing and plate making operations, their parts and functions and the safety rules relating to their operation.
10.02 Set up and operate proofing and plate making tools and equipment.
10.03 Perform operator maintenance on proofing and plate making equipment.
10.04 Identify equipment and materials used in proofing and plate making to obtain proper exposures using a transmission density guide.
10.05 Produce proofs on Diazo, silver and color proofing materials.
10.06 Inspect and evaluate proofs to original mechanical.
10.07 Identify, contrast and compare image carriers such as paper, photo direct, foil, aluminum additive and aluminum subtractive for run length and quality to suit customer specifications.
10.08 Process paper, photo direct, foil, aluminum additive and aluminum subtractive image carriers to manufacturer specifications.
10.09 Inspect and evaluate plates to proofs.
10.10 File, handle and retrieve flats and plates.

11.0 Perform offset operations--The student will be able to:
11.01 Identify the equipment and materials used in offset presswork operations, their parts and functions and the safety rules, rules relating to their operation.
11.02 Set up and operate offset presswork tools and equipment.
11.03 Perform operator maintenance on offset presswork equipment.
11.04 Define and explain the basic principle of the lithographic process.
11.05 Compare and contrast a single-sheet feeder, stream-fed, web-fed systems.

11.06 Compare and contrast deliver systems for sheet- and web-fed systems.
11.07 Compare and contrast register systems such as side-guide, pull-guide and head register.
11.08 Compare and contrast ink and moisture system for sheet- and web-fed systems.
11.09 Explain make ready procedures in proper sequence in preparation for actual production.
11.10 Apply basic principles of offset lithography pertaining to dampening systems (ducted and continuous).
11.11 Apply basic principles of offset lithography pertaining to fountain solutions chemical components (acid, alkaline and neutral).
11.12 Apply basic principles of offset lithography pertaining to pH control and its effects on the lithographic process.
11.13 Apply basic principles of offset lithography pertaining to interrelationships of paper.
11.14 Demonstrate the inking system by identifying each part and making proper adjustments.
11.15 Make ready and demonstrate feeder and delivery systems.
11.16 Demonstrate methods for achieving register by making machine adjustments.
11.17 Apply basic principles of offset press operations to produce work and turn, work and tumble and sheetwise printed products.

12.0 Perform finishing operations--The student will be able to:
12.01 Identify the equipment and materials used in finishing/binding operation, their parts and functions and the safety rules relating to their operation.
12.02 Identify basic principles of finishing/binding operations pertaining to pre-press paper cutting, post press paper cutting and post bindery cutting (after folding, stitching, etc.).
12.03 Apply basic principles of finishing/binding operations pertaining to sheet cutting.
12.04 Identify basic principles of finishing/binding operations pertaining to grain, caliper and finish (coated or uncoated or paper).
12.05 Identify basic principles of finishing/binding operations pertaining to signature configurations for sheet and web presses.
12.06 Apply basic principles of finishing/binding operations pertaining to folding.
12.07 Apply basic principles of finishing/binding operations pertaining to scoring and perforating.
12.08 Identify basic principles of finishing/binding operations pertaining to collating and gathering.
12.09 Identify basic principles of finishing/binding operations pertaining to binding alternatives (saddle, side, perfect, comb, spiral, case, etc.).
12.10 Identify basic principles of finishing/binding operations pertaining to adhesive binding (padding and fan-apart).

13.0 Demonstrate appropriate communication skills--The student will be able to:
13.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
13.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
13.03 Read and follow written and oral instructions.
13.04 Answer and ask questions coherently and concisely.
13.05 Read critically by recognizing assumptions and implications and by evaluating ideas.

13.06 Demonstrate appropriate telephone/communication skills.

14.0 Demonstrate appropriate math skills--The student will be able to:
- 14.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
- 14.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
- 14.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 14.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 14.05 Demonstrate an understanding of federal, state and local taxes and their computation.

15.0 Demonstrate appropriate understanding of basic science--The student will be able to:
- 15.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
- 15.02 Draw conclusions or make inferences from data.
- 15.03 Identify health related problems which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 15.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

16.0 Perform employability skills--The student will be able to:
- 16.01 Conduct a job search.
- 16.02 Secure information about a job.
- 16.03 Identify documents that may be required when applying for a job.
- 16.04 Complete a job application form correctly.
- 16.05 Demonstrate competence in job interview techniques.
- 16.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 16.07 Identify acceptable work habits.
- 16.08 Demonstrate knowledge of how to make job changes.
- 16.09 Demonstrate acceptable employee health habits.
- 16.10 Interview job applicants.
- 16.11 Develop and monitor safe and efficient work practices.
- 16.12 Stimulate, motivate and direct the development of others.
- 16.13 Interact affectively with customers and vendors.
- 16.14 Demonstrate a knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.

17.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
- 17.01 Define entrepreneurship.
- 17.02 Describe the importance of entrepreneurship to the American economy.
- 17.03 List the advantages and disadvantages of business ownership.
- 17.04 Identify the risks involved in ownership of a business.
- 17.05 Identify the necessary personal characteristics of a successful entrepreneur.
- 17.06 Identify the business skills needed to operate a small business efficiently and effectively.

Revised: 3/11/2011

2011 – 2012

Florida Department of Education
Curriculum Framework

Program Title: **Graphic Design Support**
Career Cluster: **Arts, A/V Technology & Communication**

	CCC
CIP Number	0650.040202
Program Type	College Credit Certificate (CCC)
Program Length	15 credit hours
CTSO	Phi Beta Lambda, BPA (Business Professionals of America)
SOC Codes (all applicable)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology & Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to communication skills, illustration, design concepts and theory, typography skills, production skills, color theories, utilization of computers to produce electronic content, presentation procedures, and employability skills.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

Phi Beta Lambda and BPA are the appropriate career and technical student organizations for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate effective communication skills.
02.0 Perform illustration.
03.0 Formulate concepts/theory.
04.0 Apply design theories.
05.0 Demonstrate creative use of typography.
06.0 Demonstrate production skills.
07.0 Interpret printing processes.
08.0 Demonstrate knowledge of current industry standards, practices, and techniques.
09.0 Interpret photographic procedures.
10.0 Apply color theories.
11.0 Demonstrate industry level presentation procedures.
12.0 Utilize computer hardware, software, networks and peripherals for the production of electronic content.
13.0 Create electronic content.
14.0 Demonstrate employability skills.

2011 – 2012

Florida Department of Education
Student Performance Standards

Program Title: **Graphic Design Support**
CIP Number: **0650.040202**
Program Length: **15 Credit Hours**
SOC Code(s):

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200). At the completion of this program, the student will be able to:

01.0 Demonstrate effective communication skills--The student will be able to:

01.01 Demonstrate presentation skills.
01.02 Demonstrate effective oral communication skills.
01.03 Read and interpret written and oral instructions.

02.0 Perform illustration--The student will be able to:

02.01 Demonstrate knowledge of methods and materials.

03.0 Formulate concept/theory--The student will be able to:

03.01 Select appropriate style or technique to problem solving.
03.02 Apply principles of design.
03.03 Demonstrate the design process.

04.0 Apply design theories--The student will be able to:

04.01 Create a design in black and white and colors.
04.02 Create various mockups, dummies, and comprehensive layouts in a variety of formats.
04.03 Evaluate use of design principles utilized in various graphic design applications.

05.0 Demonstrate creative uses of typography--The student will be able to:

05.01 Develop appropriate use of type styles and letter forms.
05.02 Demonstrate application of typographical specifications.
05.03 Apply proper letters and line spaces for typesetting.
05.04 Develop working knowledge of typespacing.
05.05 Demonstrate principles of typography in design project.

06.0 Demonstrate production skills--The student will be able to:

06.01 Size photographs and illustrations.
06.02 Demonstrate correct preparation of electronic files.
06.03 Demonstrate knowledge of traditional (non-electronic) production techniques.

07.0 Interpret printing processes--The student will be able to:

07.01 Explain basic print process.

08.0 Demonstrate knowledge of current industry standards, practices, and techniques--The student will be able to:

08.01 Use industry terminology.
08.02 Explain importance of meeting deadlines.
08.03 Adjust to work conditions.

09.0 Interpret photographic procedures--The student will be able to:

09.01 Perform cropping and scaling.

10.0 Apply color theories--The student will be able to:

10.01 Apply knowledge of color theory.
10.02 Demonstrate knowledge of industry standard color systems.

11.0 Demonstrate industry level presentation procedures--The student will be able to:

11.01 Demonstrate mounting and matting procedure.
11.02 Demonstrate industry presentation procedure and techniques.

12.0 Utilize computer hardware, software, networks, and peripherals for the production of electronic content--The student will be able to:

12.01 Demonstrate understanding of various platforms, operating systems, hardware, software, peripherals, network issues, and compatibility.

13.0 Create electronic content--The student will be able to:

13.01 Use vector based, bitmap and page layout computer application software.

14.0 Demonstrate employability skills--The student will be able to:

14.01 Identify acceptable work habits.

Revised: 3/11/2011

2011 – 2012

Florida Department of Education
Curriculum Framework

Program Title: **Interactive Media Support**
Career Cluster: **Arts, A/V Technology & Communication**

	CCC
CIP Number	0650.040203
Program Type	College Credit Certificate (CCC)
Program Length	15 credit hours
CTSO	Phi Beta Lambda, BPA (Business Professionals of America)
SOC Codes (all applicable)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology & Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to communication skills, illustration, design concepts and theory, typography skills, production skills, color theories, utilization of computers to produce electronic content, presentation procedures, and employability skills.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

Phi Beta Lambda and BPA are the appropriate career and technical student organizations for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate effective communication skills.
02.0 Perform illustration.
03.0 Formulate concepts/theory.
04.0 Apply design theories.
05.0 Demonstrate creative use of typography.
06.0 Demonstrate production skills.
07.0 Demonstrate knowledge of current industry standards, practices, and techniques.
08.0 Interpret photographic procedures.
09.0 Apply marketing/advertising principles.
10.0 Apply color theories.
11.0 Demonstrate industry level presentation procedures.
12.0 Utilize computer hardware, software, networks and peripherals for the production of electronic content.
13.0 Create electronic content.
14.0 Demonstrate employability skills.

2011 – 2012

Florida Department of Education
Student Performance Standards

Program Title:	**Interactive Media Support**
CIP Number:	**0650.040203**
Program Length:	**15 credit hours**
SOC Code(s):	

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200). At the completion of this program, the student will be able to:

01.0 Demonstrate effective communication skills--The student will be able to:

- 01.01 Demonstrate presentation skills.
- 01.02 Demonstrate effective oral communication skills.
- 01.03 Read and interpret written and oral instructions.

02.0 Perform illustration--The student will be able to:

- 02.01 Demonstrate knowledge of methods and materials.

03.0 Formulate concept/theory --The student will be able

- 03.01 Select appropriate style or technique to problem solving.
- 03.02 Apply principles of design.
- 03.03 Demonstrate the design process.

04.0 Apply design theories--The student will be able to:

- 04.01 Create a design in black and white and colors.
- 04.02 Create various mockups, dummies, and comprehensive layouts in a variety of formats.
- 04.03 Evaluate use of design principles utilized in various graphic design applications.

05.0 Demonstrate creative uses of typography--The student will be able to:

- 05.01 Develop appropriate use of type styles and letter forms.
- 05.02 Demonstrate application of typographical specifications.
- 05.03 Apply proper letters and line spaces for typesetting.
- 05.04 Develop working knowledge of typespacing.
- 05.05 Demonstrate principles of typography in design project.

06.0 Demonstrate production skills--The student will be able to:

- 06.01 Size photographs and illustrations.
- 06.02 Demonstrate correct preparation of electronic files.

07.0 Demonstrate knowledge of current industry standards, practices, and techniques--The student will be able to:

07.01 Use industry terminology.
07.02 Explain importance of meeting deadlines.
07.03 Adjust to work conditions.

08.0 Interpret photographic procedures--The student will be able to:

08.01 Perform cropping and scaling.

09.0 Apply marketing/advertising principles--The student will be able to:

09.01 Identify target market.

10.0 Apply color theories--The student will be able to:

10.01 Apply knowledge of color theory.
10.02 Demonstrate knowledge of industry standard color systems.

11.0 Demonstrate industry level presentation procedures--The student will be able to:

11.01 Demonstrate industry presentation procedure and techniques.

12.0 Utilize computer hardware, software, networks, and peripherals for the production of electronic content--The student will be able to:

12.01 Demonstrate understanding of various platforms, operating systems, hardware, software, peripherals, network issues, and compatibility.

13.0 Create electronic content--The student will be able to:

13.01 Use vector based, bitmap and page layout computer application software.
13.02 Create web design.

14.0 Demonstrate employability skills--The student will be able to:

14.01 Identify acceptable work habits.

2011 – 2012

Florida Department of Education
Curriculum Framework

Program Title: **Graphic Design Production**
Career Cluster: **Arts, A/V Technology & Communication**

	CCC
CIP Number	0650.040204
Program Type	College Credit Certificate (CCC)
Program Length	24 credit hours
CTSO	Phi Beta Lambda, BPA (Business Professionals of America)
SOC Codes (all applicable)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology & Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to communication skills, team skills, safe and efficient work practices, creation of advertising layouts, illustration, design concepts and theory, typography skills, production skills, color theories, utilization of computers to produce electronic content, presentation procedures, and employability skills.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

Phi Beta Lambda and BPA are the appropriate career and technical student organizations for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate effective communication skills.
02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
04.0 Perform illustration.
05.0 Formulate concepts/theory.
06.0 Apply design theories.
07.0 Demonstrate creative use of typography.
08.0 Create advertising layouts.
09.0 Demonstrate production skills.
10.0 Interpret printing processes.
11.0 Demonstrate knowledge of current industry standards, practices, and techniques.
12.0 Interpret photographic procedures.
13.0 Apply color theories.
14.0 Demonstrate industry level presentation procedures.
15.0 Utilize computer hardware, software, networks and peripherals for the production of electronic content.
16.0 Create electronic content.
17.0 Demonstrate employability skills.

2011 – 2012

Florida Department of Education
Student Performance Standards

Program Title: **Graphic Design Production**
CIP Number: **0650.040204**
Program Length: **24 credit hours**
SOC Code(s):

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200). At the completion of this program, the student will be able to:

01.0 Demonstrate effective communication skills--The student will be able to:

01.01 Demonstrate presentation skills.
01.02 Demonstrate effective oral communication skills.
01.03 Read and interpret written and oral instructions.

02.0 Demonstrate team skills--The student will be able to:

02.01 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:

03.01 Demonstrate proper care of equipment.
03.02 Demonstrate typical workplace tasks in a timely manner.

04.0 Perform illustration--The student will be able to:

04.01 Demonstrate versatile illustration styles and techniques.
04.02 Demonstrate knowledge of methods and materials.
04.03 Create computer illustrations.

05.0 Formulate concept/theory--The student will be able

05.01 Select appropriate style or technique to problem solving.
05.02 Display creative talent and ingenuity.
05.03 Apply principles of design.
05.04 Demonstrate the design process.

06.0 Apply design theories--The student will be able to:

06.01 Create a design in black and white and colors.
06.02 Create various mockups, dummies, and comprehensive layouts in a variety of formats.
06.03 Evaluate use of design principles utilized in various graphic design applications.

07.0 Demonstrate creative uses of typography--The student will be able to:

07.01 Develop appropriate use of type styles and letter forms.
07.02 Demonstrate application of typographical specifications.

07.03 Apply type construction design.
07.04 Apply proper letters and line spaces for typesetting.
07.05 Develop working knowledge of typespacing.
07.06 Demonstrate principles of typography in design project.
07.07 Utilize desktop computer and industry standard software for type production.

08.0 Create advertising layouts--The student will be able to:

08.01 Identify advertising needs and develop appropriate solution.
08.02 Produce comprehensive layouts for advertising in newspaper, advertising, magazines, billboards, and an advertising campaign.

09.0 Demonstrate production skills--The student will be able to:

09.01 Size photographs and illustrations.
09.02 Demonstrate correct preparation of electronic files.
09.03 Demonstrate knowledge of traditional (non-electronic) production techniques.

10.0 Interpret printing processes--The student will be able to:

10.01 Determine methods of printing and specialty printing methods.
10.02 Select appropriate substrates and inks for projects.
10.03 Explain color separation process.
10.04 Identify and specify half-tone and line negatives.
10.05 Interpret signature and imposition procedures
10.06 Analyze and identify method of proofing.
10.07 Explain basic print process.

11.0 Demonstrate knowledge of current industry standards, practices, and techniques--The student will be able to:

11.01 Explain copyright procedures.
11.02 Use industry terminology.
11.03 Identify industry practice and procedures.
11.04 Explain importance of meeting deadlines.
11.05 Adjust to work conditions.

12.0 Interpret photographic procedures--The student will be able to:

12.01 Describe how to coordinate photographic procedures with photographer.
12.02 Perform cropping and scaling.
12.03 Operate camera.

13.0 Apply color theories--The student will be able to:

13.01 Apply knowledge of color theory.
13.02 Demonstrate knowledge of industry standard color systems.

14.0 Demonstrate industry level presentation--The student will be able to:

14.01 Demonstrate mounting and matting procedure.

14.02 Demonstrate industry presentation procedure and techniques.

15.0 Utilize computer hardware, software, networks, and peripherals for the production of electronic content--The student will be able to:

15.01 Demonstrate understanding of various platforms, operating systems, hardware, software, peripherals, network issues, and compatibility.

16.0 Create electronic content--The student will be able to:

16.01 Use vector based, bitmap and page layout computer application software.

17.0 Demonstrate employability skills--The student will be able to:
17.01 Identify acceptable work habits.

Revised: 3/11/2011

2011 – 2012

Florida Department of Education
Curriculum Framework

Program Title: **Interactive Media Production**
Career Cluster: **Arts, A/V Technology & Communication**

	CCC
CIP Number	0650.040205
Program Type	College Credit Certificate (CCC)
Program Length	24 credit hours
CTSO	Phi Beta Lambda, BPA (Business Professionals of America)
SOC Codes (all applicable)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology & Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

The content includes but is not limited to communication skills, team skills, illustration, design concepts and theory, typography skills, production skills, creation of advertising layouts, color theories, utilization of computers to produce electronic content, presentation procedures, and employability skills.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

Phi Beta Lambda and BPA are the appropriate career and technical student organizations for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Demonstrate effective communication skills.
02.0 Demonstrate team skills.
03.0 Demonstrate safe and efficient work practices.
04.0 Perform illustration.
05.0 Formulate concepts/theory.
06.0 Apply design theories.
07.0 Demonstrate creative use of typography.
08.0 Create advertising layouts.
09.0 Demonstrate production skills.
10.0 Demonstrate knowledge of current industry standards, practices, and techniques.
11.0 Interpret photographic procedures.
12.0 Apply color theories.
13.0 Demonstrate industry level presentation procedures.
14.0 Utilize computer hardware, software, networks and peripherals for the production of electronic content.
15.0 Create electronic content.
16.0 Demonstrate employability skills.

2011 – 2012

Florida Department of Education
Student Performance Standards

Program Title: **Interactive Media Production**
CIP Number: **0650.040205**
Program Length: **24 credit hours**
SOC Code(s):

This certificate program is part of the Graphics Technology AS/AAS degree program (0650.040200). At the completion of this program, the student will be able to:

01.0 Demonstrate effective communication skills--The student will be able to:

- 01.01 Demonstrate presentation skills.
- 01.02 Demonstrate effective oral communication skills.
- 01.03 Read and interpret written and oral instructions.

02.0 Demonstrate team skills--The student will be able to:

- 02.01 Demonstrate ability to work as part of a team.

03.0 Demonstrate safe and efficient work practices--The student will be able to:

- 03.01 Demonstrate proper care of equipment.
- 03.02 Demonstrate typical workplace tasks in a timely manner.

04.0 Perform illustration--The student will be able to:

- 04.01 Demonstrate versatile illustration styles and techniques.
- 04.02 Demonstrate knowledge of methods and materials.
- 04.03 Create computer illustrations.

05.0 Formulate concept/theory--The student will be able

- 05.01 Select appropriate style or technique to problem solving.
- 05.02 Display creative talent and ingenuity.
- 05.03 Apply principles of design.
- 05.04 Demonstrate the design process.

06.0 Apply design theories--The student will be able to:

- 06.01 Create a design in black and white and colors.
- 06.02 Create various mockups, dummies, and comprehensive layouts in a variety of formats.
- 06.03 Evaluate use of design principles utilized in various graphic design applications.

07.0 Demonstrate creative uses of typography--The student will be able to:

- 07.01 Develop appropriate use of type styles and letter forms.

07.02 Demonstrate application of typographical specifications.
07.03 Apply type construction design.
07.04 Apply proper letters and line spaces for typesetting.
07.05 Demonstrate principles of typography in design project.
07.06 Utilize desktop computer and industry standard software for type production.

08.0 Create advertising layouts--The student will be able to:

08.01 Identify advertising needs and develop appropriate solution.

09.0 Demonstrate production skills--The student will be able to:

09.01 Size photographs and illustrations.
09.02 Demonstrate correct preparation of electronic files.

10.0 Demonstrate knowledge of current industry standards, practices, and techniques--The student will be able to:

10.01 Explain copyright procedures.
10.02 Use industry terminology.
10.03 Identify industry practice and procedures.
10.04 Explain importance of meeting deadlines.
10.05 Adjust to work conditions.

11.0 Interpret photographic procedures--The student will be able to:

11.01 Perform cropping and scaling.
11.02 Operate camera.

12.0 Apply color theories--The student will be able to:

12.01 Apply knowledge of color theory.
12.02 Demonstrate knowledge of industry standard color systems.

13.0 Demonstrate industry level presentation procedures--The student will be able to:

13.01 Demonstrate industry presentation procedure and techniques.

14.0 Utilize computer hardware, software, networks, and peripherals for the production of electronic content--The student will be able to:

14.01 Demonstrate understanding of various platforms, operating systems, hardware, software, peripherals, network issues, and compatibility.

15.0 Create electronic content--The student will be able to:

15.01 Use vector based, bitmap and page layout computer application software.
15.02 Create web design.

16.0 Demonstrate employability skills--The student will be able to:

16.01 Identify acceptable work habits.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Music Production Technology**
Career Cluster: **Arts, A/V Technology and Communication**

	AS	AAS
CIP Number	1650099900	0650099900
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-2040	27-2040
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

The purpose of this program is to prepare students for employment in music production occupations or to provide supplemental professional training for persons previously or currently employed in this field. The content includes, but is not limited to, instruction that prepares individuals for positions such as music directors, singers, composers, sound engineers, producers, programmers, salespeople (retail), manufacturer’s representatives, consultants, music editors, sound designers, sound systems designers, audio assistants, audio technicians, a/v technicians, studio managers/supervisors, archivists and related workers. This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Music Production Technology industry: planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Laboratory activities are an integral part of this program and include the use of multi-track recording systems, computers which will interface with these systems, audio reinforcement systems, sound mixing devices and peripheral equipment.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education

coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Audio Technology (0650099901) – 15 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate knowledge of basic musical skills.
02.0 Demonstrate competence in basic keyboard skills.
03.0 Demonstrate knowledge of music history.
04.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry.
05.0 Demonstrate set-up and configuration of a computer for audio applications.
06.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment.
07.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system.
08.0 Perform transactions with music industry suppliers.
09.0 Demonstrate management skills.
10.0 Demonstrate knowledge of the legal issues of copyright and contracts.
11.0 Demonstrate employability skills.
12.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Music Production Technology**
CIP Numbers: **0650099900 AAS**
1650099900 AS
Program Length: **64 Credit Hours**
SOC Code(s): **27-2040**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Demonstrate knowledge of basic musical skills—The student will be able to:
- 01.01 Demonstrate knowledge of musical structure.
- 01.02 Analyze the style, structure, and technical content of selected written and performed music.
- 01.03 Apply listening skills for hearing live and recorded music.
- 01.04 Identify performance characteristics of musical instruments.

02.0 Demonstrate competence in basic keyboard skills--The student will be able to:
- 02.01 Demonstrate basic knowledge of scales and chord progressions.
- 02.02 Follow basic musical notation.
- 02.03 Demonstrate basic knowledge of a keyboard.

03.0 Demonstrate knowledge of music history --The student will be able to:
- 03.01 Contrast stylistic periods of composition and performance through analysis of music scores.
- 03.02 Contrast stylistic periods of composition and performance through analysis of live and recorded performances.
- 03.03 Identify primary contributions of principal composers from the Renaissance through present.
- 03.04 Identify primary forms of music for all performing media.
- 03.05 Identify the components of musical form (motives, phrases, etc.) visually and aurally.
- 03.06 Associate particular forms of music with particular stylistic periods.
- 03.07 List the names of instruments that were prevalent in particular historical periods of music.
- 03.08 Demonstrate knowledge of multicultural (world) music.

04.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry--The student will be able to:
- 04.01 Demonstrate an understanding of MIDI.
- 04.02 Demonstrate proficiency in using MIDI instruments to record sounds using a digital sampler.
- 04.03 Utilize a computer and multiple MIDI instruments.
- 04.04 Record a single sound track; add multiple sound tracks, and change MIDI voices using the software.

04.05 Demonstrate an understanding of MIDI and other control protocol in the recording studio.
04.06 Configure MIDI and other show control devices in the studio or live environment.
04.07 Troubleshoot MIDI and control communication problems.

05.0 Demonstrate set-up and configuration of a computer for audio applications-- The student will be able to:
05.01 Install and configure software related to audio programs.
05.02 Demonstrate basic knowledge of computer system requirements.

06.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment--The student will be able to:
06.01 Assess the audio technology needs of a music production (Pre-Production).
06.02 Appraise musical needs of client (personnel, hardware, software, etc).
06.03 Evaluate available audio resources.
06.04 Select and configure appropriate hardware and software.
06.05 Develop a production plan to meet client needs.
06.06 Manage personnel and technical resources for the execution of the project.
06.07 Evaluate the final project for quality and appropriateness.
06.08 Formulate strategies for producing multi-track recording.
06.09 Evaluate production needs for microphone applications.
06.10 Demonstrate proficiency with multi-track, multi-channeled mixing consoles.
06.11 Formulate strategies for electronic editing.
06.12 Formulate strategies for multi-track recording to industry standards.
06.13 Configure audio recording systems for optimal and appropriate use of signal processing equipment.
06.14 Develop strategies for using MIDI.
06.15 Engineer a recording session and prepare appropriate documentation.
06.16 Mix multi-track recording.
06.17 Configure audio equipment for optimal musical mix.
06.18 Create a mixing plan.
06.19 Evaluate the quality of multi-track recording.
06.20 Interpret audio needs for end user.
06.21 Supervise equipment operator.
06.22 Evaluate quality of the final mix to industry standards.

07.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system--The student will be able to:
07.01 Demonstrate basic understanding of audio electronics (head room, biasing, distortion, equalization, frequency response, etc.).
07.02 Demonstrate basic understanding of acoustics.
07.03 Demonstrate knowledge of principles of operation of analog/digital devices (block diagram).
07.04 Demonstrate basic understanding of audio signal flow in an analog or digital chain.
07.05 Formulate strategies for audio reinforcement of music productions.
07.06 Evaluate performance needs.
07.07 Evaluate technical needs as appropriate to given spaces.
07.08 Configure a sound reinforcement system to meet performance needs.
07.09 Analyze various audio qualities to achieve proper sound mix.
07.10 Perform transactions with audio suppliers.

07.11 Design a plot for proper microphone and speaker selection and placement.

08.0 Perform transactions with music industry suppliers--The student will be able to:
08.01 Research sources for needed equipment, supplies and educational materials.
08.02 Differentiate the levels of quality in the hierarchy of manufacturers, distributors and suppliers.
08.03 Evaluate purchasing agreements including bids, warranties, and maintenance contracts.
08.04 Evaluate the technical specifications of audio related products.
08.05 Execute the purchase of audio equipment, supplies and educational materials.

09.0 Perform specified management skills--The student will be able to:
09.01 Organize scheduling for live music performances.
09.02 Organize scheduling for recording sessions.
09.03 Develop and manage budgets for musical events (performance sessions and equipment).
09.04 Manage live musical performances.
09.05 Manage music recording sessions.
09.06 Demonstrate understanding of music production audio personnel hierarchy.

10.0 Demonstrate knowledge of legal issues of copyright and contracts--The student will be able to:
10.01 Define and implement contractual agreements with unions, agents, managers and other representatives of the commercial music production industry.
10.02 Evaluate and apply copyright and licensing laws.
10.03 Identify potential music marketing areas and manage product distribution.
10.04 Recognize the right of artists and employ successful negotiation of contractual agreements.

11.0 Demonstrate employability skills--The student will be able to:
11.01 Create and write a résumé and cover letter.
11.02 Prepare and compile a work portfolio/demo or recording.
11.03 Identify acceptable work habits.
11.04 Demonstrate competence in job interview techniques.
11.05 Formulate strategy for post graduation.
11.06 Generate a career plan.
11.07 Demonstrate knowledge of the "Federal Right-To-Know Law" as recorded in (29 CFR-1910, 1200).

12.0 Demonstrate an understanding of entrepreneurship--The student will be able to:
12.01 Define entrepreneurship.
12.02 Describe the importance of entrepreneurship to the American economy.
12.03 List the advantages and disadvantages of business ownership.
12.04 Identify the risks involved in ownership of a business.
12.05 Identify the necessary personal characteristics of a successful entrepreneur.
12.06 Identify the business skills needed to operate a small business efficiently and effectively.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Audio Technology**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0650099901
Program Type	College Credit Certificate (CCC)
Program Length	15 Credit Hours
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4011
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

The purpose of this program is to prepare students for initial employment as a sound technician or recording technician, or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to, set up and configuration of a computer for audio applications, and the operation of basic reproduction, reinforcement and recording audio equipment.

This certificate program is part of the Music Production Technology AS/AAS degree program (0650099900).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part this program and include the use of multi-track recording systems, computers which will interface with these systems, audio reinforcement systems, sound mixing devices and peripheral equipment. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

05.0 Demonstrate set-up and configuration of a computer for audio applications.
06.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment.
07.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Audio Technology**
CIP Number: **0650099901**
Program Length: **15 Credit Hours**
SOC Code(s): **27-4011**

This certificate program is part of the Music Production Technology AS/AAS degree program (0650099900). At the completion of this program, the student will be able to:

05.0 Demonstrate set-up and configuration of a computer for audio applications **--**The student will be able to:
  05.01 Install and configure software related to audio programs.
  05.02 Demonstrate basic knowledge of computer system requirements.
  05.03 Install basic peripheral devices related to audio programs.

06.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment--The student will be able to:
  06.01 Assess the audio technology needs of a music production (Pre-Production).
  06.03 Evaluate available audio resources.
  06.04 Select and configure appropriate hardware and software.
  06.08 Formulate strategies for producing multi-track recording.
  06.09 Evaluate production needs for microphone applications.
  06.10 Demonstrate proficiency with multi-track, multi-channeled mixing consoles.
  06.11 Formulate strategies for electronic editing.
  06.13 Configure audio recording systems for optimal and appropriate use of signal processing equipment.
  06.15 Engineer a recording session and prepare appropriate documentation.
  06.16 Mix multi-track recording.
  06.17 Configure audio equipment for optimal musical mix.
  06.18 Create a mixing plan.
  06.19 Evaluate the quality of multi-track recording.
  06.20 Interpret audio needs for end user.
  06.21 Supervise equipment operator.
  06.22 Evaluate quality of the final mix to industry standards.

07.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system **–** The student will be able to:
  07.01 Demonstrate basic understanding of audio electronics (head room, biasing, distortion, equalization, frequency response, etc.).
  07.02 Demonstrate basic understanding of acoustics.
  07.03 Demonstrate knowledge of principles of operation of analog/digital devices (block diagram).
  07.04 Demonstrate basic understanding of audio signal flow in an analog or digital chain.
  07.05 Formulate strategies for audio reinforcement of music productions.
  07.06 Evaluate performance needs.
  07.07 Evaluate technical needs as appropriate to given spaces.
  07.08 Configure a sound reinforcement system to meet performance needs.

07.09 Analyze various audio qualities to achieve proper sound mix.
07.10 Perform transactions with audio suppliers.
07.11 Design a plot for proper microphone and speaker selection and placement.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Theater and Entertainment Technology**
Career Cluster: **Arts A/V Technology and Communication**

	AS	AAS
CIP Number	1650.999901	0650.999901
Program Type	College Credit	College Credit
Standard Length	64 Credit Hours	64 Credit Hours
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-0000	27-0000
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of 64 hours.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student

Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Articulation

To be transferable statewide between institutions, this program must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific articulation agreements with each other.

For details on existing articulation agreements, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Program Length

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. The standard length of this program is 64 credit hours according to Rule 6A-14.030, F.A.C.

Certificate Programs

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.). This AS/AAS degree program includes the following College Credit Certificates:

Stage Technology (0650999902) – 17 Credit Hours

Standards for the above certificate programs are contained in separate curriculum frameworks.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Construct and install scenery to the specifications required in a scene design.
02.0 Perform the duties of a stage hand.
03.0 Install and operate sound equipment for performance.
04.0 Implement a "sound design" for live entertainment product.
05.0 Hang circuit and focus stage lights to the specifications required in a lighting design.
06.0 Perform the duties of a light board operator and follow spot operator.
07.0 Maintain stage, lighting, sound, and shop equipment.
08.0 Install and operate AV/Multimedia presentation equipment.
09.0 Demonstrate safe work practices.
10.0 Function as part of a technical team in planning, implementing, and running the technical aspects of theatrical/entertainment productions.
11.0 Demonstrate appropriate communication skills.
12.0 Demonstrate appropriate math skills.
13.0 Demonstrate appropriate understanding of basic science.
14.0 Demonstrate employability skills.
15.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Theater and Entertainment Technology**
CIP Numbers: **0650.999901 AAS**
1650.999901 AS
Program Length: **64 Credit Hours**
SOC Code(s): **27-0000**

The AS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS, and it must be transferable according to Rule 6A-14.030 (2), F.A.C. The AAS degree requires the inclusion of a minimum of 15 credits of general education coursework according to SACS. At the completion of this program, the student will be able to:

01.0 Construct and install scenery to the specifications required in a scene design--The student will be able to:
- 01.01 Use hand and power tools commonly found in scene shops.
- 01.02 Draft working drawings when given a ground plan and designer's elevations.
- 01.03 Choose the appropriate materials and hardware for scenic construction.
- 01.04 Construct common two-dimensional scenery.
- 01.05 Construct common three-dimensional scenery.
- 01.06 Demonstrate application techniques used in painting scenery.
- 01.07 Construct properties and mechanical special effects.

02.0 Perform the duties of a stage hand--The student will be able to:
- 02.01 Operate equipment commonly found in performance venues.
- 02.02 Determine methods for scenery repair within a limited time frame.
- 02.03 Assume crew chief responsibilities.
- 02.04 Perform all duties in a disciplined manner as required by the demands of performance.
- 02.05 Install and operate special effects such as fog, pyrotechnics, and automated devices.

03.0 Install and operate theatrical sound equipment for performance--The student will be able to:
- 03.01 Identify sound equipment used in productions.
- 03.02 Assemble various components to develop an audio recording or reinforcement system.
- 03.03 Install a sound system resulting in optimal performance and safety of the equipment.
- 03.04 Operate sound equipment in both record and playback mode.

04.0 Implement a "sound design" for live entertainment productions--The student will be able to:
- 04.01 Identify sound equipment used in productions.
- 04.02 Record and edit sound effects for live entertainment productions.
- 04.03 Operate components of sound systems as required for both reinforcement and effects applications.
- 04.04 Construct, install, and operate mechanical, electrical, and electronic sound effects for productions.

04.05 Execute sound cues during rehearsal and performance.

05.0 Hang, circuit and focus stage lights to the specifications required in a lighting design--The student will be able to:
05.01 Read a standard lighting plot.
05.02 Read a standard instrument schedule.
05.03 Identify stage lighting equipment.
05.04 Hang and circuit lights for a stage production.
05.05 Focus lights for a stage production.
05.06 Hang and set control parameters for intelligent lighting fixtures.

06.0 Perform the duties of a light board operator and follow spot operator--The student will be able to:
06.01 Make and read a lighting cue sheet.
06.02 Program and execute cues on a computerized lighting console in both rehearsal and performance.
06.03 Execute cues for intelligent lighting.
06.04 Execute cues using a follow spot in rehearsal and performance.

07.0 Maintain stage lighting, sound, and shop equipment--The student will be able to:
07.01 Calibrate and operate test equipment through all modes of operation as necessary for the maintenance of systems.
07.02 Locate malfunctions using applicable diagnostic methods.
07.03 Read and understand technical manuals.
07.04 Record and maintain documentation on equipment including manufacturer's warranties and parts inventories.

08.0 Install and operate AV/multimedia presentation equipment--The student will be able to:
08.01 Set up and operate basic video production equipment including camcorders, studio cameras, video monitors, video decks, switchers and video DAs.
08.02 Set up and operate a basic 35 mm slide presentation in both single and multi-projector configurations.
08.03 Set up and operate a variety of video projection systems.
08.04 Install and operate data projection equipment.
08.05 Determine layout for an AV show including screen and equipment location.
08.06 Select and install appropriate cable and interfaces for AV set up.
08.07 Perform basic troubleshooting on AV systems.

09.0 Demonstrate safe work practices--The student will be able to:
09.01 Identify safety rules for stage and shop equipment.
09.02 Identify health and environmental hazards of materials used in stage production.
09.03 Select and use the appropriate protective clothing and equipment when working in a shop or stage environment.
09.04 Use shop and stage equipment in accordance with both manufacturer and industry safety standards.
09.05 Identify and correct unsafe work practices.

10.0 Function as part of a technical team in planning, implementing and running the technical aspects of theatrical/entertainment productions--The student will be able to:
10.01 Perform as a member of a technical team within the framework of an organized production.

10.02 Schedule job assignments in order to meet production deadlines.
10.03 Apply accepted principles of theater technology to production situations.
10.04 Adapt learned skills and generate new approaches in order to solve unique production problems.

11.0 Demonstrate appropriate communication skills--The student will be able to:
11.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
11.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
11.03 Read and follow written and oral instructions.
11.04 Answer and ask questions coherently and concisely.
11.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
11.06 Demonstrate appropriate telephone/communication skills.

12.0 Demonstrate appropriate math skills--The student will be able to:
12.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
12.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
12.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
12.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
12.05 Demonstrate an understanding of federal, state and local taxes and their computation.

13.0 Demonstrate appropriate understanding of basic science--The student will be able to:
13.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
13.02 Draw conclusions or make inferences from data.
13.03 Identify health related problems that may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
13.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

14.0 Demonstrate employability skills--The student will be able to:
14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job interview.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate acceptable employee health habits.
14.10 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes Chapter 442.

15.0 Demonstrate an understanding of entrepreneurship--The student will be able to:

15.01 Define entrepreneurship.
15.02 Describe the importance of entrepreneurship to the American economy.
15.03 List the advantages and disadvantages of business ownership. Identify the risks involved in ownership of a business.
15.04 Identify the necessary personal characteristics of a successful entrepreneur.
15.05 Identify the business skills needed to operate a small business efficiently and effectively.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Stage Technology**
Career Cluster: **Arts A/V Technology and Communication**

	CCC
CIP Number	0650.999902
Program Type	College Credit Certificate (CCC)
Program Length	17 Credits
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4099
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm

Purpose

This certificate program is part of the Theater and Entertainment Technology AS/AAS degree program (0650099901).

A College Credit Certificate consists of a program of instruction of less than sixty (60) credits of college-level courses, which is part of an AS or AAS degree program and prepares students for entry into employment (Rule 6A-14.030, F.A.C.).

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts A/V Technology and Communication career cluster.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student

Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Standards

After successfully completing this course the student will be able to perform the following:

01.0 Construct and install scenery to the specifications required in a scene design.
02.0 Perform the duties of a stage hand.
03.0 Install and operate sound equipment for performance.
05.0 Hang circuit and focus stage lights to the specifications required in a lighting design.
06.0 Perform the duties of a light board operator and follow spot operator.
10.0 Function as part of a technical team in planning, implementing, and running the technical aspects of theatrical/entertainment productions.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Stage Technology**
CIP Number: **0650.999902**
Program Length: **17 Credit Hours**
SOC Code(s): **27-4099**

This certificate program is part of the Theater and Entertainment Technology AS/AAS degree program (0650999901). At the completion of this program, the student will be able to:

01.0 Construct and install scenery to the specifications required in a scene design--The student will be able to:
  01.01 Use hand and power tools commonly found in scene shops.
  01.03 Choose the appropriate materials and hardware for scenic construction.
  01.04 Construct common two-dimensional scenery.
  01.05 Construct common three-dimensional scenery.
  01.06 Demonstrate application techniques used in painting scenery.
  01.07 Construct properties and mechanical special effects.

02.0 Perform the duties of a stage hand--The student will be able to:
  02.01 Operate equipment commonly found in performance venues.
  02.02 Determine methods for scenery repair within a limited time frame.
  02.03 Assume crew chief responsibilities.
  02.04 Perform all duties in a disciplined manner as required by the demands of performance.

03.0 Install and operate sound equipment for performance--The student will:
  03.01 Identify sound equipment used in productions.
  03.02 Assemble various components to develop an audio recording or reinforcement system.
  03.03 Install a sound system resulting in optimal performance and safety of the equipment.
  03.04 Operate sound equipment in both record and playback mode.

05.0 Hang circuit and focus stage lights to the specifications required in a lighting design--The student will be able to:
  05.01 Read a standard lighting plot.
  05.02 Read a standard instrument schedule.
  05.03 Identify stage lighting equipment.
  05.04 Hang and circuit lights for a stage production.
  05.05 Focus lights for a stage production.

06.0 Perform the duties of a light board operator and follow spot operator--The student will be able to:
  06.02 Program and execute cues on a computerized lighting console in both rehearsal and performance.
  06.04 Execute cues using a follow spot in rehearsal and performance.

10.0 Function as part of a technical team in planning, implementing and running the technical aspects of theatrical/entertainment productions--The student will be able to:

10.01 Perform as a member of a team within the framework of an organized production.
10.02 Schedule job assignments in order to meet production deadlines.
10.03 Apply accepted principles of theater technology to production situations.
10.04 Adapt learned skills and generate new approaches in order to solve unique production problems.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Careers in Fashion and Interior Design**
Program Type:	**Non Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	Secondary – Non Career Preparatory
Program Number	8209100
CIP Number	0404050107
Grade Level	6-8 30, 31
Standard Length	.5 Credit
Teacher Certification	VOC HME EC @4 HOME EC @2 FAM CON SC 1
CTSO	FCCLA
Facility Code	231 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)

Purpose

The purpose of this program is to give students an opportunity to apply knowledge and skills related to the area of Arts, A/V Technology and Communication.

This course will assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in interior design and fashion design. The content includes but is not limited to the development of leadership skills, communication skills, and employability skills; resource management; exploration of design careers; working with textiles and elements of design; basic sewing skills; clothing choices; technology in the design industry; and completion of projects related to fashion and interior design.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum cannot be modified.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate leadership skills.
02.0 Demonstrate employability skills as they relate to the design industry.
03.0 Demonstrate effective communication skills.
04.0 Analyze careers in the design industry.
05.0 Select and use tools and equipment.
06.0 Identify characteristics and care of textiles.
07.0 Explain the elements and principles of design.
08.0 Explain how environmental factors impact design.
09.0 Demonstrate basic sewing skills.
10.0 Analyze clothing choices.
11.0 Develop a project related to fashion.
12.0 Analyze interior design choices.
13.0 Develop a project related to interior design.
14.0 Utilize technology as it relates to the design industry.
15.0 Demonstrate the skills involved in effective resource management.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Careers in Fashion and Interior Design**
Course Number: **8209100**
Course Credit: **.5**

Course Description:

The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in interior design and fashion design. The content includes but is not limited to the development of leadership skills, communication skills, and employability skills; resource management; exploration of design careers; working with textiles and elements of design; basic sewing skills; clothing choices; technology in the design industry; and completion of projects related to fashion and interior design.

01.0 Demonstrate leadership skills – the student will be able to:
  01.0 Identify roles and responsibilities of members of professional and community service organizations, including career and technical student organizations.
  02.0 Work cooperatively as a group member to achieve organizational goals.
  03.0 Demonstrate leadership roles and organizational responsibilities.
  04.0 Identify and utilize the planning process.
  05.0 Develop a personal growth project.

02.0 Demonstrate employability skills as they relate to the design industry – the student will be able to:
  02.01 Identify personal talents and abilities that can contribute to positive self esteem and success in the work place.
  02.02 Practice teamwork skills.
  02.03 Practice employability skills.
  02.04 Practice positive work ethics and identify negative work ethics.
  02.05 Exhibit work expectations of an employer in the design industry.
  02.06 Apply math, reading, science, and critical thinking skills as they relate to the design industry.

03.0 Demonstrate effective communication skills – the student will:
  03.01 Describe why communication is the basis for all relationships.
  03.02 Distinguish between non-assertive, assertive, and aggressive communication.
  03.03 Demonstrate communication skills that promote positive relationships in the work place.
  03.04 Practice active listening skills.
  03.05 Utilize conflict resolution skills.

04.0 Analyze careers in the design industry – the student will be able to:
  04.01 Describe careers in the design industry.
  04.02 Classify careers from entry level to professional level.
  04.03 Explore entrepreneurship opportunities in the design industry

04.04 Research and present information on a design career to include roles and responsibilities, employment opportunities and requirements for education and training.

05.0 Select and use tools and equipment – the student will be able to:
05.01 Identify and select the appropriate tool for the assignment.
05.02 Demonstrate the proper and safe use of tools and equipment.
05.03 Practice care and maintenance of tools and equipment.

06.0 Identify characteristics and care of textiles – the student will be able to:
06.01 Identify a variety of fabrics through tactile activities.
06.02 Compare and contrast natural and synthetic fabrics.
06.03 Recognize types of fabric construction.
06.04 Identify fabrics appropriate for various purposes.

07.0 Explain the elements and principles of design – the student will be able to:
07.01 Define and illustrate the elements of design.
07.02 Create a color wheel.
07.03 Recognize basic color schemes.
07.04 Research the psychology of color.
07.05 Define and illustrate the principles of design.

08.0 Explain how environmental factors impact design – the student will be able to:
08.01 Define green design.
08.02 Research eco-friendly design products.
08.03 Examine the positive and negative impact that a design product has on the environment.
08.04 Redesign an item into another useful product.

09.0 Demonstrate basic sewing skills – the student will be able to:
09.01 Identify and give the purpose of sewing machine parts.
09.02 Demonstrate math skills as they relate to sewing.
09.03 Demonstrate the threading of the sewing machine.
09.04 Demonstrate straight stitching.
09.05 Identify and demonstrate various stitch length and width selections.
09.06 Interpret written instructions and construct a basic sewing project.

10.0 Analyze clothing choices – the student will be able to:
10.01 Explain the impact of trends and social climates on fashion styles.
10.02 Identify appropriate clothing styles for various events.
10.03 Identify factors that impact clothing costs.
10.04 Demonstrate the procedure for recording accurate body measurements.
10.05 Analyze proper fit.

11.0 Develop a project related to fashion – the student will be able to:
11.01 Select materials and supplies for a fashion project.
11.02 Calculate the costs of a given fashion project.
11.03 Interpret written directions for constructing a fashion project.
11.04 Apply math skills and construct a fashion project.

12.0 Analyze interior design choices – the student will be able to:

12.01 Explain the impact of political and social climates on decorating styles.
12.02 Identify characteristics of furnishing styles.
12.03 Identify factors that impact furnishing choices.

13.0 Develop a project related to interior design – the student will be able to:
13.01 Apply the principals and elements of design in selecting an interior design project.
13.02 Interpret written directions for assembling/constructing an interior design project.
13.03 Apply math skills and construct an interior design project.

14.0 Utilize technology as it relates to the design industry – the student will be able to:
14.01 Identify technology utilized in the design industry.
14.02 Analyze technology trends impacting the design industry.
14.03 Utilize technology.

15.0 Demonstrate the skills involved in effective resource management – the student will be able to:
15.01 Identify steps of the decision-making process.
15.02 Distinguish between a need and a want.
15.03 Explain how values and goals affect decisions.
15.04 Develop a budget and savings plan.
15.05 Analyze the relationship between resources and attainment of lifestyle goals.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Careers in Fashion and Interior Design and Career Planning**
Program Type:	**Non Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	Secondary – Non Career Preparatory
Program Number	8209200
CIP Number	0404050108
Grade Level	6-8, 30, 31
Standard Length	.5 Credit
Teacher Certification	VOC HME EC @4 HOME EC @2 FAM CON SC 1
CTSO	FCCLA
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)

Purpose

This course will assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in interior design and fashion design. The content includes but is not limited to the development of leadership skills, communication skills, and employability skills; resource management; exploration of design careers; working with textiles and elements of design; basic sewing skills; clothing choices; technology in the design industry; and completion of projects related to fashion and interior design.

The career and education planning course required by Section 1003.4156, Florida Statutes, has been integrated into this course. This course must include career exploration using CHOICES or a comparable cost-effective program and educational planning using the online student advising system known as Florida Academic Counseling and Tracking for Students at the Internet website FACTS.org; and shall result in the completion of a personalized academic and career plan.

This course is the same as Careers in Fashion and Interior Design, except that it has included the career and education planning competencies.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum cannot be modified.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate leadership skills.
02.0 Demonstrate employability skills as they relate to the design industry.
03.0 Demonstrate effective communication skills.
04.0 Analyze careers in the design industry.
05.0 Select and use tools and equipment.
06.0 Identify characteristics and care of textiles.
07.0 Explain the elements and principles of design.
08.0 Explain how environmental factors impact design.
09.0 Demonstrate basic sewing skills.
10.0 Analyze clothing choices.
11.0 Develop a project related to fashion.

12.0 Analyze interior design choices.
13.0 Develop a project related to interior design.
14.0 Utilize technology as it relates to the design industry.
15.0 Demonstrate the skills involved in effective resource management.
16.0 Describe how work relates to the needs and functions of the economy, society, and personal fulfillment.
17.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.
18.0 Describe the need for career planning, changing careers, and the concept of lifelong learning and how they relate to personal fulfillment.
19.0 Appraise how legislation such as the Americans with Disabilities Act and Child Labor Laws regulates employee rights.
20.0 Use results of an interest assessment to describe their top interest areas and relate to careers/career clusters.
21.0 Identify five values that they consider important in making a career choice.
22.0 Identify skills needed for career choices and match to personal abilities.
23.0 Demonstrate the ability to apply skills of self-advocacy and self-determination throughout the career planning process.
24.0 Identify strengths and areas in which assistance is needed at school.
25.0 Apply results of all assessments to personal abilities in order to make realistic career choices.
26.0 Demonstrate the ability to locate, understand, and use career information.
27.0 Use the internet to access career and education planning information.
28.0 Identify skills that are transferable from one occupation to another.
29.0 Demonstrate use of career resources to identify occupational clusters, career opportunities within each cluster, employment outlook, and education/ training requirements.
30.0 Identify and demonstrate use of steps to make career decisions.
31.0 Identify and demonstrate processes for making short and long term goals.
32.0 Demonstrate personal qualities (e.g. Dependability, punctuality, responsibility, integrity, getting along with others) that are needed to be successful in the workplace.
33.0 Demonstrate skills to interact positively with others.
34.0 Demonstrate employability skills such as working on a team, problem-solving and organizational skills.
35.0 Explain the relationship between educational achievement and career success.
36.0 Identify secondary and postsecondary school courses that meet tentative career plans.
37.0 Identify advantages and disadvantages of entering various secondary and postsecondary programs for the attainment of career goals.
38.0 Demonstrate knowledge of varied types and sources of financial aid to obtain assistance for postsecondary education.
39.0 Identify inappropriate discriminatory behaviors that may limit opportunities in the workplace.
40.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/work goals.
41.0 Describe how extracurricular programs can be incorporated in career and education planning.
42.0 Demonstrate knowledge of high school exit options (e.g., standard diploma, certificate of completion, special diploma, GED, etc.) And impact on post-school opportunities.
43.0 Describe high school credits and explain how GPA'S are calculated.
44.0 Demonstrate skills to complete a job application.
45.0 Demonstrate skills essential for a job interview.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Careers in Fashion and Interior Design and Career Planning**
Course Number: **8209200**
Course Credit: **.5**

Course Description:

This course will assist students in making informed decisions regarding their future academic and occupational goals and to provide information regarding careers in interior design and fashion design. The content includes but is not limited to the development of leadership skills, communication skills, and employability skills; resource management; exploration of design careers; working with textiles and elements of design; basic sewing skills; clothing choices; technology in the design industry; and completion of projects related to fashion and interior design.

01.0 Demonstrate leadership skills – the student will be able to:
- 01.01 Identify roles and responsibilities of members of professional and community service organizations, including career and technical student organizations.
- 01.02 Work cooperatively as a group member to achieve organizational goals.
- 01.03 Demonstrate leadership roles and organizational responsibilities.
- 01.04 Identify and utilize the planning process.
- 01.05 Develop a personal growth project.

02.0 Demonstrate employability skills as they relate to the design industry – the student will be able to:
- 02.02 Identify personal talents and abilities that can contribute to positive self esteem and success in the work place.
- 02.03 Practice teamwork skills.
- 02.04 Practice employability skills.
- 02.05 Practice positive work ethics and identify negative work ethics.
- 02.06 Exhibit work expectations of an employer in the design industry.
- 02.07 Apply math, reading, science, and critical thinking skills as they relate to the design industry.

03.0 Demonstrate effective communication skills – the student will be able to:
- 03.02 Describe why communication is the basis for all relationships.
- 03.03 Distinguish between non-assertive, assertive, and aggressive communication.
- 03.04 Demonstrate communication skills that promote positive relationships in the work place.
- 03.05 Practice active listening skills.
- 03.06 Utilize conflict resolution skills.

04.0 Analyze careers in the design industry – the student will be able to:
- 04.01 Describe careers in the design industry.
- 04.02 Classify careers from entry level to professional level.
- 04.03 Explore entrepreneurship opportunities in the design industry

04.04 Research and present information on a design career to include roles and responsibilities, employment opportunities and requirements for education and training.

05.0 Select and use tools and equipment – the student will be able to:
05.01 Identify and select the appropriate tool for the assignment.
05.02 Demonstrate the proper and safe use of tools and equipment.
05.03 Practice care and maintenance of tools and equipment.

06.0 Identify characteristics and care of textiles – the student will be able to:
06.01 Identify a variety of fabrics through tactile activities.
06.02 Compare and contrast natural and synthetic fabrics.
06.03 Recognize types of fabric construction.
06.04 Identify fabrics appropriate for various purpose.

07.0 Explain the elements and principles of design – the student will be able to:
07.01 Define and illustrate the elements of design.
07.02 Create a color wheel.
07.03 Recognize basic color schemes.
07.04 Research the psychology of color.
07.05 Define and illustrate the principles of design.

08.0 Explain how environmental factors impact design – the student will be able to:
08.01 Define green design.
08.02 Research eco-friendly design products.
08.03 Examine the positive and negative impact that a design product has on the environment.
08.04 Redesign an item into another useful product.

09.0 Demonstrate basic sewing skills – the student will be able to:
09.01 Identify and give the purpose of sewing machine parts.
09.02 Demonstrate math skills as they relate to sewing.
09.03 Demonstrate the threading of the sewing machine.
09.04 Demonstrate straight stitching.
09.05 Identify and demonstrate various stitch length and width selections.
09.06 Interpret written instructions and construct a basic sewing project.

10.0 Analyze clothing choices – the student will be able to:
10.01 Explain the impact of trends and social climates on fashion styles.
10.02 Identify appropriate clothing styles for various events.
10.03 Identify factors that impact clothing costs.
10.04 Demonstrate the procedure for recording accurate body measurements.
10.05 Analyze proper fit.

11.0 Develop a project related to fashion – the student will be able to:
11.01 Select materials and supplies for a fashion project.
11.02 Calculate the costs of a given fashion project.
11.03 Interpret written directions for constructing a fashion project.
11.04 Apply math skills and construct a fashion project.

12.0 Analyze interior design choices – the student will be able to:

12.01 Explain the impact of political and social climates on decorating styles.
12.02 Identify characteristics of furnishing styles.
12.03 Identify factors that impact furnishing choices.

13.0 Develop a project related to interior design – the student will be able to:
13.01 Apply the principals and elements of design in selecting an interior design project.
13.02 Interpret written directions for assembling/constructing an interior design project.
13.03 Apply math skills and construct an interior design project.

14.0 Utilize technology as it relates to the design industry – the student will be able to:
14.01 Identify technology utilized in the design industry.
14.02 Analyze technology trends impacting the design industry.
14.03 Utilize technology.

15.0 Demonstrate the skills involved in effective resource management – the student will be able to:
15.01 Identify steps of the decision-making process.
15.02 Distinguish between a need and a want.
15.03 Explain how values and goals affect decisions.
15.04 Develop a budget and savings plan.
15.05 Analyze the relationship between resources and attainment of lifestyle goals.

Listed below are the competencies that must be met to satisfy the requirements of (Section 1003.4156, Florida Statutes):

Understanding the Workplace
16.0 Describe how work relates to the needs and functions of the economy, society, and personal fulfillment.
17.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.
18.0 Describe the need for career planning, changing careers, and the concept of lifelong learning and how they relate to personal fulfillment.
19.0 Appraise how legislation such as the Americans with Disabilities Act and Child Labor Laws regulates employee rights.

Self-awareness
20.0 Use results of an interest assessment to describe their top interest areas and relate to careers/career clusters.
21.0 Identify five values that they consider important in making a career choice.
22.0 Identify skills needed for career choices and match to personal abilities.
23.0 Demonstrate the ability to apply skills of self-advocacy and self-determination throughout the career planning process.
24.0 Identify strengths and areas in which assistance is needed at school.
25.0 Apply results of all assessments to personal abilities in order to make realistic career choices.

Exploring Careers
26.0 Demonstrate the ability to locate, understand, and use career information.
27.0 Use the internet to access career and education planning information.

28.0 Identify skills that are transferable from one occupation to another.
29.0 Demonstrate use of career resources to identify occupational clusters, career opportunities within each cluster, employment outlook, and education/ training requirements.

Goal Setting and Decision-making

30.0 Identify and demonstrate use of steps to make career decisions.
31.0 Identify and demonstrate processes for making short and long term goals.

Workplace Skills

32.0 Demonstrate personal qualities (e.g. Dependability, punctuality, responsibility, integrity, getting along with others) that are needed to be successful in the workplace.
33.0 Demonstrate skills to interact positively with others.
34.0 Demonstrate employability skills such as working on a team, problem-solving and organizational skills.

Career and Education Planning

35.0 Explain the relationship between educational achievement and career success.
36.0 Identify secondary and postsecondary school courses that meet tentative career plans.
37.0 Identify advantages and disadvantages of entering various secondary and postsecondary programs for the attainment of career goals.
38.0 Demonstrate knowledge of varied types and sources of financial aid to obtain assistance for postsecondary education.
39.0 Identify inappropriate discriminatory behaviors that may limit opportunities in the workplace.
40.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/work goals.
41.0 Describe how extracurricular programs can be incorporated in career and education planning.
42.0 Demonstrate knowledge of high school exit options (e.g., standard diploma, certificate of completion, special diploma, GED, etc.) And impact on post-school opportunities.
43.0 Describe high school credits and explain how GPA'S are calculated.

Job Search

44.0 Demonstrate skills to complete a job application.
45.0 Demonstrate skills essential for a job interview.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Design**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	**PSAV**
Program Number	8209600	B070600
CIP Number	0507.080106	0507.080106
Grade Level	9-12	30, 31
Standard Length	8 Credits	1200 Hours
Teacher Certification	BUS ED 1 @2 VOE @7 TEACH CBE @7 BUS DP @7 G ELECT DP @7 G CLERICAL @7 G SECRETAR @7 G STENOG @4 @7 G TEC ELEC $7 G COMP SCI @6 @2 COMM ART @7	BUS ED 1 @2 VOE @7 TEACH CBE @7 BUS DP @7 G ELECT DP @7 G CLERICAL @7 G SECRETAR @7 G STENOG @4 @7 G TEC ELEC $7 G COMP SCI @6 @2 COMM ART @7
CTSO	FBLA BPA	FBLA BPA
SOC Codes (all applicable)	15-1041 43-9031 27-1024 27-1014	15-1041 43-9031 27-1024 27-1014
Facility Code	212 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

This program is designed to prepare students for employment as a Information Technology Assistant, Production Assistant, Digital Assistant Designer, Graphic Designer, and Multi-Media Designer.

This program offers a broad foundation of knowledge and skills to prepare students for employment in digital publishing positions. The content includes enhanced practical experiences in computer generated art and text, graphic design, graphic production, electronic design skills, preparation of electronic layouts and illustrations, and electronic scanning; and development of specialized skills in multimedia presentations.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the digital publishing industry: planning; management; finance; technical and production skills; underlying principles of technology and design.

Program Structure

This program is a planned sequence of instruction consisting of five Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	OTA0040*	Information Technology Assistant	150 Hours	15-1041
B	GRA0024	Production Assistant	150 Hours	43-9031
C	GRA0025	Digital Assistant Designer	300 Hours	43-9031
D	GRA0026	Graphic Designer	300 Hours	27-1024
E	GRA0027	Media Designer	300 Hours	27-1014

* *Note: OTA0040 is a core program.*

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8200320	Keyboarding and Business Skills	.5 Credit	15-1041	2
		AND			
	8200330	Computer and Business Skills	.5 credit		
		OR			
	8209020	Computing for College and Careers	1 credit		
		OR			
	8207310	Introduction to Information Technology	1 credit		
B	8209510	Digital Design 1	1 Credit	43-9031	2
C	8209520	Digital Design 2	1 Credit	43-9031	3
	8209530	Digital Design 3	1 Credit		3
D	8209540	Digital Design 4	1 Credit	27-1024	3
	8209550	Digital Design 5	1 Credit		3
E	8209560	Digital Design 6	1 Credit	27-1014	3
	8209570	Digital Design 7	1 Credit		3

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

The standard length of this program is 1200 hours.

To be transferable statewide between institutions, this program must have been reviewed, and a “transfer value” assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

Federal and state legislation requires the provision of accommodations for students with disabilities to meet individual needs and ensure equal access. Adult students with disabilities must self-identify and request such services. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

Career and Technical Student Organization (CTSO)

FBLA - BPA are the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

The PSAV component of this program (B070600) has a statewide articulation agreement approved by the Articulation Coordinating Committee:

Graphics Technology (0650.040200/1650.040200) – 9 Credits

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

Keyboarding and Business Skills competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations.
02.0 Demonstrate comprehension and communication skills.
03.0 Use technology to apply and enhance communication skills in technical reading, writing.
04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. Demonstrate initiative, courtesy, loyalty, honesty, cooperation and punctuality as a team member.
05.0 Practice quality performance in the learning environment and the workplace.
06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
07.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning though job shadowing, mentoring, e-coaching, etc.
08.0 Demonstrate personal and interpersonal skills appropriate for the workplace.
09.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance.

AND

Computer and Business Skills competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations.
02.0 Demonstrate comprehension and communication skills.
03.0 Use Technology to apply and enhance communications skills in technical reading, writing.
04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/ employee roles.
05.0 Practice quality performance in the learning environment and the workplace.
06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance.
08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals.
09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace.
11.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance.
12.0 Perform e-mail activities.
13.0 Demonstrate operating systems.
14.0 Develop an awareness of emerging technologies.

Computing for College and Careers Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance.
02.0 Demonstrate comprehension and communication skills.
03.0 Use technology to enhance the effectiveness of communication skills.
04.0 Develop an awareness of management functions and organizational structures as they relate to today’s workplace and employer/employee roles.
05.0 Practice quality performance in the learning environment and the workplace.
06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance.
08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals.
09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals.
10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace.
11.0 Perform functions and responsibilities to accomplish job objectives and enhance workplace performance.
12.0 Perform e-mail activities.
13.0 Demonstrate operating systems.
14.0 Develop an awareness of emerging technologies.

OR

Introduction to Information Technology Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance.
02.0 Demonstrate comprehension and communication skills.
03.0 Use technology to enhance the effectiveness of communication skills.
04.0 Develop an awareness of management functions and organizational structures as they relate to today’s workplace and employer/employee roles.
05.0 Practice quality performance in the learning environment and the workplace.
06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals.
09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals.
10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace.
12.0 Perform e-mail activities.
14.0 Develop an awareness of emerging technologies.
15.0 Participate in work-based learning experiences.
16.0 Demonstrate knowledge of different operating systems.
17.0 Demonstrate proficiency navigating the internet, intranet, and the WWW.
18.0 Demonstrate proficiency using HTML commands.
19.0 Demonstrate proficiency in page design applicable to the WWW.
20.0 Demonstrate proficiency using specialized web design software.
21.0 Develop an awareness of the information technology industry.
22.0 Develop an awareness of microprocessors and digital computers.
23.0 Develop an awareness of programming languages.
24.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model.
25.0 Demonstrate proficiency using common software applications.
26.0 Demonstrate proficiency using specialized software applications.
27.0 Demonstrate proficiency in computer skills
28.0 Demonstrate knowledge of digital publishing concepts.
29.0 Perform decision-making activities.
30.0 Perform layout, design, and measurement activities.
31.0 Demonstrate proficiency in digital publishing operations.
32.0 Demonstrate proficiency in digital imaging
33.0 Demonstrate proficiency in multimedia presentation
34.0 Demonstrate language arts knowledge and skills
35.0 Demonstrate mathematics knowledge and skills.
36.0 Demonstrate science knowledge and skills
37.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
38.0 Solve problems using critical thinking skills, creativity and innovation.
39.0 Use information technology tools
40.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
41.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
42.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
43.0 Describe the importance of professional ethics and legal responsibilities.
44.0 Explain the importance of employability and entrepreneurship skills
45.0 Demonstrate personal money-management concepts, procedures, and strategies
46.0 Demonstrate promotion applications for the selected marketing industry

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Design**
PSAV Number: **B070600**

Course Number: OTA0040
Occupational Completion Point: A
Information Technology Assistant – 150 Hours– SOC Code 15-1041

Keyboarding and Business Skills competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations. – The student will be able to:
- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 01.03 Demonstrate basic file management skills.

02.0 Demonstrate comprehension and communication skills. – The student will be able to:
- 02.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
- 02.02 Write clear and well-organized research papers, integrating a variety of information.
- 02.03 Prepare and deliver an oral report with appropriate materials to the class
- 02.04 Participate in large group discussions as a member and/or a leader.
- 02.05 Take notes, organize, summarize, and paraphrase ideas and details.
- 02.06 Accurately follow written and oral instructions.
- 02.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 Use technology to apply and enhance communication skills in technical reading, writing. – The student will be able to:
- 03.01 Select and use word processing software and accompanying features to enhance written business communications.
- 03.02 Use the writing process to create/edit business documents appropriate to the subject matter, purpose, and audience.
- 03.03 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. Demonstrate initiative, courtesy, loyalty, honesty, cooperation and punctuality as a team member. – The student will be able to:
- 04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
- 04.02 Explore and demonstrate an awareness of current trends in business and the

employee's role in maintaining productive business environments in today's global workplace.
04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace. – The student will be able to:
05.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).
05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. – The student will be able to:
06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

07.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. – The student will be able to:
07.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
07.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
07.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow up.)
07.04 Design, initiate, refine, and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.

08.0 Demonstrate personal and interpersonal skills appropriate for the workplace. – The student will be able to:
08.01 Accept constructive criticism.
08.02 Apply appropriate strategies to manage and resolve conflict in work situations.
08.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, and respect for self and others, professional dress, etc.).

09.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. – The student will be able to:

09.01 Perform business tasks (e.g., filing and records management, scheduling, reprographics, mail handling, etc.).

09.02 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

AND

Computer and Business Skills competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations. – The student will be able to:

01.01 Develop keyboarding skills to enter and manipulate text and data.

01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.

01.03 Identify and describe communications and networking systems used in workplace environments.

01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.

01.05 Demonstrate basic file management skills.

01.06 Troubleshoot problems with computer software, hardware, peripherals, and other office equipment.

01.07 Describe ethical issues and problems associated with computers and information systems.

01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

02.0 Demonstrate comprehension and communication skills – The student will be able to:

02.01 Take notes, organize, summarize, and paraphrase ideas and details.

02.02 Accurately follow written and oral instructions.

02.03 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 Use technology to apply and enhance communication skills in technical reading, writing. – The student will be able to:

03.01 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communications.

03.02 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.

03.03 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/ employee roles. – The student will be able to:

04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.

04.02 Explore and demonstrate an awareness of current trends in business and the employee’s role in maintaining productive business environments in today’s global workplace.
04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace. – The student will be able to:
05.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).
05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. – The student will be able to:
06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
06.02 Identify, analyze and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace and to accomplish job objectives and enhance workplace performance. – The student will be able to:
07.01 Analyze, interpret, compile and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
07.03 Select and use the correct mathematical processes and tools to solve complex problem settings that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. – The student will be able to:
08.01 Assess, analyze, and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. – The student will be able to:

09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow-up).
09.04 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.
09.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
09.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
09.08 Build mentor relationships with local professionals in the industry.

10.0 Demonstrate personal and interpersonal skills appropriate for the workplace. – The student will be able to:

10.01 Accept constructive criticism.
10.02 Apply appropriate strategies to manage and resolve conflict in work situations.
10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, and respect for self and others, professional dress, etc.).

11.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. – The student will be able to:

11.01 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

12.0 Perform e-mail activities. – The student will be able to:

12.01 Describe e-mail capabilities and functions.
12.02 Use the Internet to perform e-mail activities.

13.0 Demonstrate operating systems. – The student will be able to:

13.01 Identify operating system file naming conventions.
13.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
13.03 Demonstrate a working knowledge of standard file formats.
13.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

14.0 Develop an awareness of emerging technologies. – The student will be able to:

14.01 Compare and contrast various methods of evaluation for emerging technologies.
14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.

14.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

OR

Computing for College and Careers Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance -- The student will be able to:
- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 01.03 Identify and describe communications and networking systems used in workplace environments.
- 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
- 01.05 Demonstrate basic computer file management skills.
- 01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 01.07 Describe ethical issues and problems associated with computers and information systems.
- 01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:
- 02.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
- 02.02 Write clear and well-organized research papers, integrating a variety of information.
- 02.03 Prepare and deliver an oral report with appropriate materials to the class
- 02.04 Participate in large group discussions as a member and/or a leader.
- 02.05 Take notes, organize, summarize, and paraphrase ideas and details.
- 02.06 Accurately follow written and oral instructions.
- 02.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 Use technology to enhance the effectiveness of communication skills -- The student will be able to:
- 03.01 Select and use word processing software and accompanying features to enhance written business communications.
- 03.02 Use the writing process to create and edit business documents appropriate to the subject matter, purpose, and audience.
- 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.
- 03.04 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.
- 03.05 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles -- The student will be able to:
- 04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
- 04.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.
- 04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace -- The student will be able to:
- 05.01 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).
- 05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance -- The student will be able to:
- 06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
- 06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
- 06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance -- The student will be able to:
- 07.01 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
- 07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
- 07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- The student will be able to:
- 08.01 Assess, analyze, and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
- 08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.

08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:

09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow-up).
09.04 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.
09.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
09.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
09.08 Build mentor relationships with local professionals in the industry.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace -- The student will be able to:

10.01 Accept constructive criticism.
10.02 Apply appropriate strategies to manage and resolve conflicts in work situations.
10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

11.0 Perform functions and responsibilities to accomplish job objectives and enhance workplace performance -- The student will be able to:

11.01 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

12.0 Perform e-mail activities – The student will be able to:

12.01 Describe e-mail capabilities and functions.
12.02 Use the Internet to perform e-mail activities.

13.0 Demonstrate operating systems – The student will be able to:

13.01 Identify operating system file naming conventions.
13.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
13.03 Demonstrate a working knowledge of standard file formats.
13.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

14.0 Develop an awareness of emerging technologies -- The student will be able to:

14.01 Compare and contrast various methods of evaluation for emerging technologies.

- 14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
- 14.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

OR

Introduction to Information Technology Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance -- The student will be able to:

- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 01.03 Identify and describe communications and networking systems used in workplace environments.
- 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
- 01.05 Troubleshoot problems with computer hardware peripherals and other office equipment.
- 01.06 Describe ethical issues and problems associated with computers and information systems.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:

- 02.01 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
- 02.02 Use professional business vocabulary appropriate for information technology environments.
- 02.03 Organize ideas and communicate oral and written messages appropriate for information technology environments.
- 02.04 Collaborate with individuals and teams to complete tasks and solve information technology problems.
- 02.05 Identify, define, and discuss professional information technology terminology appropriate for internal and external communications in an information technology environment.
- 02.06 Apply the writing process to the creation of appropriate documents following designated business formats.
- 02.07 Demonstrate an awareness of project management concepts and tools (e.g., timelines, deadlines, resource allocation, time management, delegation of tasks, collaboration, etc.).

03.0 Use technology to enhance the effectiveness of communication skills -- The student will be able to:

- 03.01 Use database, spreadsheet, and presentation software, scheduling, and integrated software packages to enhance communication.
- 03.02 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today’s workplace and employer/employee roles -- The student will be able to:

04.01 Explore, design, implement, and evaluate organizational structures and cultures.
04.02 Explore and demonstrate an awareness of current trends in business and the employee’s role in maintaining productive business environments in today’s global workplace.
04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace -- The student will be able to:
05.01 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).
05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance -- The student will be able to:
06.01 Demonstrate awareness of the following workplace essentials: Quality customer service; business ethics; confidentiality of information; copyright violations; accepted workplace rules, regulations, policies, procedures, processes, and workplace safety, and appropriate attire and grooming.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance -- The student will be able to:
07.01 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- The student will be able to:
08.01 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
08.02 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
09.01 Research, compare, and contrast information technology career clusters (e.g., characteristics needed, skills required, education required, industry certifications,

advantages and disadvantages of information technology careers, the need for information technology workers, etc.).
09.02 Describe the variety of occupations and professions within the world of information technology including those where information technology is either in a primary focus or in a supportive role.
09.03 Describe job requirements for the variety of occupations and professions within the global world of information technology.
09.04 Analyze personal skills and aptitudes in comparison with information technology career opportunities.
09.05 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.
09.06 Develop and maintain an electronic career portfolio, to include, but not limited to the Resume and Letter of Application.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace -- The student will be able to:
10.01 Accept constructive criticism.
10.02 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

12.0 Perform e-mail activities – The student will be able to:
12.01 Describe e-mail capabilities and functions.
12.02 Identify components of an e-mail message.
12.03 Identify the components of an e-mail address.
12.04 Identify when to use different e-mail options.
12.05 Attach a file to an e-mail message.
12.06 Forward an e-mail message.
12.07 Use an address book.
12.08 Reply to an e-mail message.
12.09 Use the Internet to perform e-mail activities.
12.10 Identify the appropriate use of e-mail and demonstrate related e-mail etiquette.
12.11 Identify when to include information from an original e-mail message in a response.
12.12 Identify common problems associated with widespread use of e-mail.

14.0 Develop an awareness of emerging technologies -- The student will be able to:
14.01 Compare and contrast various methods of evaluation for emerging technologies.
14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
14.03 Compare and contrast emerging technologies and describe how they impact business in the global marketplace (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

15.0 Participate in work-based learning experiences -- The student will be able to:
15.01 Participate in work-based learning experiences in an information technology environment.
15.02 Discuss the use of technology in an information technology environment.

16.0 Demonstrate knowledge of different operating systems – The student will be able to:
16.01 Identify operating system file naming conventions.

- 16.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
- 16.03 Demonstrate a working knowledge of standard file formats.
- 16.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

17.0 Demonstrate proficiency navigating the internet, intranet, and the WWW – The student will be able to:

- 17.01 Identify and describe Web terminology.
- 17.02 Demonstrate proficiency in using the basic features of GUI browsers (e.g., setting bookmarks, basic configurations, e-mail configurations, address book).
- 17.03 Define Universal Resource Locators (URLs) and associated protocols (e.g., .com, .org, .edu, .gov, .net, .mil).
- 17.04 Describe and observe Internet/Intranet ethics and copyright laws and regulatory control.
- 17.05 Trace the evolution of the Internet from its inception to the present and into the future.
- 17.06 Demonstrate proficiency using search engines (e.g., Yahoo!, Google, Northern Light, Lycos, Excite, etc.).
- 17.07 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, PDF, etc.).
- 17.08 Identify effective Boolean search strategies.

18.0 Demonstrate proficiency using HTML commands – The student will be able to:

- 18.01 Identify elements of a Web page.
- 18.02 Describe individual Web page layouts and content (e.g., writing for the Web, Web structure).
- 18.03 Define basic HTML terminology.
- 18.04 Analyze HTML source code developed by others.
- 18.05 Create Web pages using basic HTML tags (e.g., links, lists, character styles, text alignment, and tables).
- 18.06 Use storyboarding techniques for subsequent Web pages (e.g., linear, hierarchical).
- 18.07 Edit and test HTML documents for accuracy and validity.
- 18.08 Use basic functions of WYSIWYG editors.
- 18.09 Use basic functions of HTML, DHTML, and XML editors and converters.
- 18.10 Enhance web pages through the addition of images and graphics including animation.

19.0 Demonstrate proficiency in page design applicable to the WWW – The student will be able to:

- 19.01 Develop an awareness of acceptable Web page design, including index pages in relation to the rest of the Web site.
- 19.02 Describe and apply color theory as it applies to Web page design (e.g., background and text color).
- 19.03 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD ROM’s).
- 19.04 Use image design software to create and edit images.
- 19.05 Demonstrate proficiency in publishing to the Internet.
- 19.06 Demonstrate proficiency in adding downloadable forms to web pages.
- 19.07 Explain the need for web-based applications.

20.0 Demonstrate proficiency using specialized web design software -- The student will be able to:
- 20.01 Compare and contrast various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).
- 20.02 Demonstrate proficiency using use of various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).

21.0 Develop an awareness of the information technology industry -- The student will be able to:
- 21.01 Explain how information technology impacts the operation and management of business and society.
- 21.02 Explain the emergence of e-commerce and e-government and the potential impact on business and society.
- 21.03 Explain the emergence of a paperless society.

22.0 Develop an awareness of microprocessors and digital computers -- The student will be able to:
- 22.01 Describe the evolution of the digital computer.
- 22.02 Explain the general architecture of a microcomputer system.
- 22.03 Explain the evolution of microprocessors.
- 22.04 Explain software hierarchy and its impact on microprocessors.
- 22.05 Explain the need for and use of peripherals.
- 22.06 Demonstrate proficiency using peripherals.
- 22.07 Identify the basic concepts of computer maintenance and upgrades.
- 22.08 Differentiate between diagnosing and troubleshooting.

23.0 Develop an awareness of programming languages -- The student will be able to:
- 23.01 Explain the history of programming languages.
- 23.02 Explain the need for and use of compilers.
- 23.03 Explain how compilers work.
- 23.04 Identify the three types of programming design approaches (e.g., top-down, structured and object-oriented).

24.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model -- The student will be able to:
- 24.01 Identify how types of networks and how they work.
- 24.02 Identify the role of servers and clients on a network.
- 24.03 Identify benefits and risks of networked computing.
- 24.04 Identify the relationship between computer networks and other communications networks (i.e. Telephone systems).
- 24.05 Identify intranets, extranets and how they relate to the internet.
- 24.06 Demonstrate basic understanding of network administration.
- 24.07 Describe the evolution of OSI from its inception to the present and into the future.
- 24.08 Explain the interrelations of the seven layers of the Open Systems Interface (OSI) as it relates to hardware and software.

25.0 Demonstrate proficiency using common software applications -- The student will be able to:
- 25.01 Compare and contrast the appropriate use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail,

presentation, database, scheduling, financial management, java applet, music, etc.).
25.02 Demonstrate proficiency in the use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, java applet, music, etc.).

26.0 Demonstrate proficiency using specialized software applications -- The student will be able to:
26.01 Compare and contrast the appropriate use of specialized software applications (e.g., (OLTP, computer aided design, computer aided manufacturing, 3D animation process control, materials management, etc.).
26.02 Demonstrate awareness of specialized software applications (e.g.,
26.03 OLTP, computer aided design, computer aided manufacturing, 3D animation, process control, materials management, etc.)
26.04 Demonstrate the ability to incorporate digital sound.

35.0 Demonstrate mathematics knowledge and skills -- The students will be able to: AF 3.0
35.01 Demonstrate knowledge of arithmetic operations. AF 3.2
35.02 Analyze and apply data and measurements to solve problems and interpret documents. AF 3.4
35.03 Construct charts/tables/graphs using functions and data. AF 3.5

36.0 Demonstrate science knowledge and skills -- The students will be able to: AF 4.0
36.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF 4.1
36.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF 4.3

37.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas -- The students will be able to:
37.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
37.02 Locate, organize and reference written information from various sources. CM 3.0
37.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
37.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
37.05 Apply active listening skills to obtain and clarify information. CM 7.0
37.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
37.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

Course Number: GRA0024
Occupational Completion Point: B
Production Assistant – 150 Hours – SOC Code 43-9031

Intended outcomes of OCP A must be completed previously or concurrently.

15.0 Participate in work-based learning experiences -- The student will be able to:
15.01 Discuss the use of technology in a digital publishing environment.

27.0 Demonstrate proficiency in computer skills -- The student will be able to:
- 27.01 Identify basic computer parts (e.g., RAM, ROM).
- 27.02 Demonstrate an understanding of all functions of a computer.
- 27.03 Utilize appropriate font management techniques (e.g., true type, postscript, install and remove fonts).
- 27.04 Perform storage management (e.g., hard drive, DVD, CD).
- 27.05 Perform basic maintenance of computers and peripherals.

28.0 Demonstrate knowledge of digital publishing concepts -- The student will be able to:
- 28.01 Identify the skills needed by a digital designer.
- 28.02 Define commonly used terms in graphic communications.
- 28.03 Identify characteristics of paper.
- 28.04 Identify different kinds of color (e.g., spot, process).
- 28.05 Identify software used in digital publishing.
- 28.06 Demonstrate knowledge of copyright laws.

29.0 Perform decision-making activities -- The student will be able to:
- 29.01 Determine work priorities.
- 29.02 Evaluate information to be used and choose relevant material.
- 29.03 Determine the audience.
- 29.04 Demonstrate an understanding of various advertising mediums.
- 29.05 Recognize and maintain ethical standards.

30.0 Perform layout, design, and measurement activities -- The student will be able to:
- 30.01 Identify characteristics of type, type families, type series, and type styles.
- 30.02 Assemble mechanical elements electronically
- 30.03 Prepare rough layout designs.
- 30.04 Identify elements of design.

31.0 Demonstrate proficiency in digital publishing operations -- The student will be able to:
- 31.01 Complete projects using a variety of fonts, sizes, leading, and alignments.
- 31.02 Output projects using a variety of devices (e.g., printers, image setters).
- 31.03 Design with type using kerning, tracking, horizontal/vertical scale, baseline shift, etc.
- 31.04 Produce projects using tables.
- 31.05 Produce projects using white space.
- 31.06 Assemble multipage documents.
- 31.07 Create documents that use master pages and stylesheets.
- 31.08 Use a variety of styles to produce effective layouts
- 31.09 Produce a document using printer and reader spreads.
- 31.10 Use publishing software to create a pre-press profile.
- 31.11 Produce a variety of designs using layout/~~paste-up~~ software.

32.0 Demonstrate proficiency in digital imaging -- The student will be able to:
- 32.01 Demonstrate proper use of a scanner/input devices/ digital camera.
- 32.02 Crop and scale photographs electronically.
- 32.03 Demonstrate an understanding of file formats and modes (e.g., EPS, TIFF, PICT, JPEG, ASCII, BINARY).
- 32.04 Demonstrate use of image editing software.
- 32.05 Proofread electronically and manually.

34.0 Demonstrate language arts knowledge and skills -- The students will be able to: AF 2.0
- 34.01 Locate, comprehend and evaluate key elements of oral and written information. AF 2.4
- 34.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF 2.5
- 34.03 Present information formally and informally for specific purposes and audiences. AF 2.9

38.0 Solve problems using critical thinking skills, creativity and innovation -- The students will be able to:
- 38.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS 1.0
- 38.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 38.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 38.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

41.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance -- The students will be able to:
- 41.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 41.02 Explain emergency procedures to follow in response to workplace accidents.
- 41.03 Create a disaster and/or emergency response plan. SHE 2.0

Course Number: GRA0025
Occupational Completion Point: C
Digital Assistant Designer – 300 Hours– SOC Code 43-9031

Intended outcomes of OCP A, and OCP B must be completed previously.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
- 09.01 Prepare a portfolio.
- 09.02 Present a portfolio to an audience.

15.0 Participate in work-based learning experiences -- The student will be able to:
- 15.01 Participate in work-based learning experiences in a digital publishing environment.
- 15.02 Compare and contrast the software applications used in a digital publishing environment.

27.0 Demonstrate proficiency in computer skills -- The student will be able to:
- 27.01 Understand computer management skills (e.g., install and remove software, folder management, shortcuts, etc.).
- 27.02 Perform storage management activities using a variety of devices (e.g., CD ROM, monitors, modems, zip drives, jazz drives).
- 27.03 Understand disk utilities and virus protection activities.
- 27.04 Understand how to update existing software to new versions.

29.0 Perform decision-making activities -- The student will be able to:
- 29.01 Determine project specifications.

31.0 Demonstrate proficiency in digital publishing operations -- The student will be able to:
- 31.01 Produce multiple color designs using different color techniques including process color and spot color.
- 31.02 Prepare output files using pre-press preparations (e.g., color separation, font management, file management, use of postscript fonts, etc.)
- 31.03 Read work orders and prepare electronic files that meet all specifications.
- 31.04 Design a document using grids and formats.
- 31.05 Produce documents integrating elements of design.
- 31.06 Demonstrate proficiency in the use of a vector and pixel based illustration programs.

32.0 Demonstrate proficiency in digital imaging -- The student will be able to:
- 32.01 Crop and scale photographs electronically.
- 32.02 Demonstrate proficiency in use of an understanding of formats and modes (e.g., EPS, TIFF, PICT, JPEG, ASCII, binary).
- 32.03 Demonstrate use of image editing software.
- 32.04 Complete projects using proper resolution and screen values (e.g., PPI, LPI, DPI).
- 32.05 Produce electronically retouched photographs.
- 32.06 Produce projects using a digital camera.
- 32.07 Scan multiple documents.
- 32.08 Crop and scale photographs electronically using a scanner.
- 32.09 Apply the use of proper resolution and screen values (e.g., PPI, LPI, DPI in documents).
- 32.10 Produce electronically retouched photographs using tones, hues, and values.
- 32.11 Apply special effects to image files.

33.0 Demonstrate proficiency in multimedia presentation -- The student will be able to:
- 33.01 Create various quality PDF files.

39.0 Use information technology tools. -- The students will be able to:
- 39.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
- 39.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 39.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 39.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

43.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:
- 43.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 43.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 43.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 43.04 Interpret and explain written organizational policies and procedures. ELR 2.0

45.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:
  45.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
  45.02 Describe the effect of money management on personal and career goals. FL 3.0
  45.03 Develop a personal budget and financial goals. FL3.1
  45.04 Complete financial instruments for making deposits and withdrawals. FL3.2
  45.05 Maintain financial records. FL3.3
  45.06 Read and reconcile financial statements. FL3.4
  45.07 Research, compare and contrast investment opportunities.

Course Number: GRA0026
Occupational Completion Point: D
Graphic Designer – 300 Hours– SOC Code 27-1014

Intended outcomes of OCP A, OCP B, and OCP C must be completed previously.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
  09.01 Create an electronic resume.
  09.02 Prepare a portfolio
  09.03 Create an electronic portfolio.
  09.04 Present a portfolio to an audience.

15.0 Participate in work-based learning experiences -- The student will be able to:
  15.01 Participate in work-based learning experiences in a digital publishing environment.
  15.02 Discuss the management/supervisory skills needed in a digital publishing environment.

31.0 Demonstrate proficiency in digital publishing operations -- The student will be able to:
  31.01 Produce designs integrating all elements of design
  31.02 Produce electronic vector illustrations using digital software.
  31.03 Produce multiple projects using a variety of digital software.
  31.04 Prepare output files using pre-press protocols (e.g., color separation, font management, file management, use of postscript fonts, etc.).
  31.05 Perform integrated functions using various design software applications.
  31.06 Create documents using advanced features in layout software.

32.0 Demonstrate proficiency in digital imaging -- The student will be able to:
  32.01 Produce projects using vector and pixel art, gray scale, duotone, and four-color process.
  32.02 Emphasize, interpret, and establish mood and emotion using illustrations.
  32.03 Apply special effects to projects.

40.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:
  40.01 Describe the nature and types of business organizations. SY 1.0

40.02 Explain the effect of key organizational systems on performance and quality.
40.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
40.04 Explain the impact of the global economy on business organizations.

42.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:
42.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
42.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
42.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
42.04 Employ mentoring skills to inspire and teach others.

44.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:
44.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
44.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
44.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
44.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
44.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
44.06 Identify and exhibit traits for retaining employment. ECD 7.0
44.07 Identify opportunities and research requirements for career advancement. ECD 8.0
44.08 Research the benefits of ongoing professional development. ECD 9.0
44.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: GRA0027
Occupational Completion Point: E
Media Designer – 300 Hours– SOC Code 27-1024

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
09.01 Create an electronic resume.
09.02 Create an electronic portfolio.
09.03 Present a portfolio to an audience.

15.0 Participate in work-based learning experiences -- The student will be able to:
15.01 Participate in work-based learning experiences in a digital publishing environment.
15.02 Compare and contrast the software applications used in a digital publishing environment.

27.0 Demonstrate proficiency in computer skills -- The student will be able to:
27.01 Demonstrate basic functions of presentation formats (website, multimedia, digital slide show).

29.0 Perform decision-making activities -- The student will be able to:
29.01 Compare and select appropriate multimedia tools.

31.0 Demonstrate proficiency in digital publishing operations -- The student will be able to:

31.01 Produce a variety of designs integrating multimedia software.
31.02 Produce multiple color designs using proper color balance for presentation.
31.03 Create electronic presentations

33.0 Demonstrate proficiency in multimedia presentation -- The student will be able to:
  33.01 Select appropriate fonts for on-screen presentation.
  33.02 Generate presentations with fully integrated text and images.
  33.03 Create PDF files.
  33.04 Create links.
  33.05 Optimize images for the Web (e.g., file size, transmission time).
  33.06 Build pages for media presentations and standards.
  33.07 Link media elements into Web-delivered documents
  33.08 Create presentations using color effects

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Keyboarding and Business Skills**
Course Number: **8200320**
Course Credit: **1**

Course Description:

This course is designed to provide a basic overview of current business and information systems and trends and to introduce students to the basics and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental word processing applications, so that they may be used s communication tools for enhancing personal and work place proficiency in an information-based society.

10.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations. – The student will be able to:
  10.01 Develop keyboarding skills to enter and manipulate text and data.
  10.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
  10.03 Demonstrate basic file management skills.

11.0 Demonstrate comprehension and communication skills. – The student will be able to:
  11.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
  11.02 Write clear and well-organized research papers, integrating a variety of information.
  11.03 Prepare and deliver an oral report with appropriate materials to the class
  11.04 Participate in large group discussions as a member and/or a leader.
  11.05 Take notes, organize, summarize, and paraphrase ideas and details.
  11.06 Accurately follow written and oral instructions.
  11.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

12.0 Use technology to apply and enhance communication skills in technical reading, writing.

– The student will be able to:

12.01 Select and use word processing software and accompanying features to enhance written business communications.

12.02 Use the writing process to create/edit business documents appropriate to the subject matter, purpose, and audience.

12.03 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

13.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles. Demonstrate initiative, courtesy, loyalty, honesty, cooperation and punctuality as a team member. – The student will be able to:

13.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.

13.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.

13.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

14.0 Practice quality performance in the learning environment and the workplace. – The student will be able to:

14.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).

14.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

15.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. – The student will be able to:

15.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.

15.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.

15.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

16.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. – The student will be able to:

16.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.

16.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.

16.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow up.)

16.04 Design, initiate, refine, and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.

17.0 Demonstrate personal and interpersonal skills appropriate for the workplace. – The student will be able to:

17.01 Accept constructive criticism.

17.02 Apply appropriate strategies to manage and resolve conflict in work situations.

17.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, and respect for self and others, professional dress, etc.).

18.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. – The student will be able to:

18.01 Perform business tasks (e.g., filing and records management, scheduling, reprographics, mail handling, etc.).

18.02 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Computer and Business Skills**
Course Number: **8200330**
Course Credit: **1**

Course Description:

This course is designed to introduce students to the basic skills and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental computer applications using databases, spreadsheets, presentation applications, and the integration of these programs using software that meets industry standards.

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. Apply ergonomic principles applicable to the configuration of computer workstations. – The student will be able to:
- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 01.03 Identify and describe communications and networking systems used in workplace environments.
- 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
- 01.05 Demonstrate basic file management skills.
- 01.06 Troubleshoot problems with computer software, hardware, peripherals, and other office equipment.
- 01.07 Describe ethical issues and problems associated with computers and information systems.
- 01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

02.0 Demonstrate comprehension and communication skills – The student will be able to:
- 02.01 Take notes, organize, summarize, and paraphrase ideas and details.
- 02.02 Accurately follow written and oral instructions.
- 02.03 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 Use technology to apply and enhance communication skills in technical reading, writing. – The student will be able to:
- 03.01 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communications.
- 03.02 Use computer networks (e.g., Internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.
- 03.03 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Practice quality performance in the learning environment and the workplace. – The student will be able to:

04.01 Assess personal, peer, and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving and decision-making skills).

04.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

05.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance. – The student will be able to:

05.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.

05.02 Identify, analyze and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.

05.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

06.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace and to accomplish job objectives and enhance workplace performance. – The student will be able to:

06.01 Analyze, interpret, compile and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.

06.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).

06.03 Select and use the correct mathematical processes and tools to solve complex problem settings that are typical of business settings and use formulas when appropriate.

07.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals. – The student will be able to:

07.01 Assess, analyze, and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.

07.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.

07.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

08.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals. Experience work-based learning through job shadowing, mentoring, e-coaching, etc. – The student will be able to:

08.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.

08.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.

- 08.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow-up).
- 08.04 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.
- 08.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
- 08.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
- 08.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
- 08.08 Build mentor relationships with local professionals in the industry.

09.0 Demonstrate personal and interpersonal skills appropriate for the workplace. – The student will be able to:

- 09.01 Accept constructive criticism.
- 09.02 Apply appropriate strategies to manage and resolve conflict in work situations.
- 09.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, and respect for self and others, professional dress, etc.).

10.0 Perform office functions and responsibilities to accomplish job objectives and enhance workplace performance. – The student will be able to:

- 10.01 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

11.0 Perform e-mail activities. – The student will be able to:

- 11.01 Describe e-mail capabilities and functions.
- 11.02 Use the Internet to perform e-mail activities.

12.0 Demonstrate operating systems. – The student will be able to:

- 12.01 Identify operating system file naming conventions.
- 12.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
- 12.03 Demonstrate a working knowledge of standard file formats.
- 12.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, Mac, and Unix/Linux).

13.0 Develop an awareness of emerging technologies. – The student will be able to:

- 13.01 Compare and contrast various methods of evaluation for emerging technologies.
- 13.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
- 13.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Computing for College and Careers**
Course Number: **8209020**
Course Credit: **1**

Course Description:

This course is designed to provide a basic overview of current business and information systems and trends and to introduce students to the basics and foundations required for today's business environments. Emphasis is placed on developing proficiency with touch keyboarding and fundamental computer applications, so that they may be used as communication tools for enhancing personal and work place proficiency in an information-based society. This also includes proficiency with computers using databases, spreadsheets, presentation applications, and the integration of these programs using software that meets industry standards. After successful completion of this core course, students will have met Occupational Completion Point - A, Information Technology Assistant, SOC Code 43- 4000

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance -- The student will be able to:
  01.01 Develop keyboarding skills to enter and manipulate text and data.
  01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
  01.03 Identify and describe communications and networking systems used in workplace environments.
  01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
  01.05 Demonstrate basic computer file management skills.
  01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
  01.07 Describe ethical issues and problems associated with computers and information systems.
  01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:
  02.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
  02.02 Write clear and well-organized research papers, integrating a variety of information.
  02.03 Prepare and deliver an oral report with appropriate materials to the class
  02.04 Participate in large group discussions as a member and/or a leader.
  02.05 Take notes, organize, summarize, and paraphrase ideas and details.
  02.06 Accurately follow written and oral instructions.
  02.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 Use technology to enhance the effectiveness of communication skills -- The student will be able to:
- 03.01 Select and use word processing software and accompanying features to enhance written business communications.
- 03.02 Use the writing process to create and edit business documents appropriate to the subject matter, purpose, and audience.
- 03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.
- 03.04 Use computer networks (e.g., internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.
- 03.05 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles -- The student will be able to:
- 04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
- 04.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.
- 04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace -- The student will be able to:
- 05.01 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).
- 05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance -- The student will be able to:
- 06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
- 06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
- 06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance -- The student will be able to:

07.01 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- The student will be able to:
08.01 Assess, analyze, and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow-up).
09.04 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.
09.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
09.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
09.08 Build mentor relationships with local professionals in the industry.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace -- The student will be able to:
10.01 Accept constructive criticism.
10.02 Apply appropriate strategies to manage and resolve conflicts in work situations.
10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

11.0 Perform functions and responsibilities to accomplish job objectives and enhance workplace performance -- The student will be able to:

11.01 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

12.0 Perform e-mail activities – The student will be able to:
12.01 Describe e-mail capabilities and functions.
12.02 Use the internet to perform e-mail activities.

13.0 Demonstrate operating systems – The student will be able to:
13.01 Identify operating system file naming conventions.
13.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
13.03 Demonstrate a working knowledge of standard file formats.
13.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, MAC, and UNIX/LINUX).

14.0 Develop an awareness of emerging technologies -- The student will be able to:
14.01 Compare and contrast various methods of evaluation for emerging technologies.
14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
14.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

July 2009

Florida Department of Education
Student Performance Standards

Course Title: **Introduction to Information Technology**
Course Number: **8207310**
Course Credit: **1**

Course Description:

This course is designed to provide an introduction to information technology concepts and careers as well as the impact information technology has on the world, people, and industry and basic web design concepts. The content includes information technology career research; operating systems and software applications; electronic communications including e-mail and Internet services; basic HTML, DHTML, and XML web commands and design; and emerging technologies, and Web page design. After successful completion of Introduction to Information Technology, students will have met Occupational Completion Point - A, Information Technology Assistant, SOC Code 43-4000

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance -- The student will be able to:
  01.01 Develop keyboarding skills to enter and manipulate text and data.
  01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
  01.03 Identify and describe communications and networking systems used in workplace environments.
  01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
  01.05 Troubleshoot problems with computer hardware peripherals and other office equipment.
  01.06 Describe ethical issues and problems associated with computers and information systems.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:
  02.01 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
  02.02 Organize ideas and communicate oral and written messages appropriate for information technology environments.
  02.03 Collaborate with individuals and teams to complete tasks and solve information technology problems.
  02.04 Identify, define, and discuss professional information technology terminology appropriate for internal and external communications in an information technology environment.
  02.05 Apply the writing process to the creation of appropriate documents following designated business formats.
  02.06 Demonstrate an awareness of project management concepts and tools (e.g., timelines, deadlines, resource allocation, time management, delegation of tasks, collaboration, etc.).

03.0 Use technology to enhance the effectiveness of communication skills -- The student will be able to:

03.01 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.
03.02 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles -- The student will be able to:
04.01 Explore, design, implement, and evaluate organizational structures and cultures.
04.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.
04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace -- The student will be able to:
05.01 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).
05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance -- The student will be able to:
06.01 Demonstrate awareness of the following workplace essentials: quality customer service; business ethics; confidentiality of information; copyright violations; accepted workplace rules, regulations, policies, procedures, processes, and workplace safety, and appropriate attire and grooming.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance -- The student will be able to:
07.01 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- The student will be able to:
08.01 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.

08.02 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:

09.01 Research, compare, and contrast information technology career clusters (e.g., characteristics needed, skills required, education required, industry certifications, advantages and disadvantages of information technology careers, the need for information technology workers, etc.).
09.02 Describe the variety of occupations and professions within the world of information technology including those where information technology is either in a primary focus or in a supportive role.
09.03 Describe job requirements for the variety of occupations and professions within the global world of information technology.
09.04 Analyze personal skills and aptitudes in comparison with information technology career opportunities.
09.05 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.
09.06 Develop and maintain an electronic career portfolio, to include, but not limited to the resume and letter of application.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace -- The student will be able to:

10.01 Accept constructive criticism.
10.02 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

15.0 Participate in work-based learning experiences -- The student will be able to:

15.01 Participate in work-based learning experiences in an information technology environment.
15.02 Discuss the use of technology in an information technology environment.

12.0 Perform e-mail activities – The student will be able to:

12.01 Describe e-mail capabilities and functions.
12.02 Identify components of an e-mail message.
12.03 Identify the components of an e-mail address.
12.04 Identify when to use different e-mail options.
12.05 Attach a file to an e-mail message.
12.06 Forward an e-mail message.
12.07 Use an address book.
12.08 Reply to an e-mail message.
12.09 Use the internet to perform e-mail activities.
12.10 Identify the appropriate use of e-mail and demonstrate related e-mail etiquette.
12.11 Identify when to include information from an original e-mail message in a response.
12.12 Identify common problems associated with widespread use of e-mail.

16.0 Demonstrate knowledge of different operating systems– The student will be able to:

16.01 Identify operating system file naming conventions.

16.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
16.03 Demonstrate a working knowledge of standard file formats.
16.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, MAC, and UNIX/LINUX).

17.0 Demonstrate proficiency navigating the internet, intranet, and the WWW – The student will be able to:
17.01 Identify and describe web terminology.
17.02 Demonstrate proficiency in using the basic features of GUI browsers (e.g., setting bookmarks, basic configurations, e-mail configurations, address book).
17.03 Define universal resource locators (URLS) and associated protocols (e.g., .com, .org, .edu, .Gov, .net, .mil).
17.04 Describe and observe internet/intranet ethics and copyright laws and regulatory control.
17.05 Trace the evolution of the internet from its inception to the present and into the future.
17.06 Demonstrate proficiency using search engines (e.g., Yahoo!, Google, Northern light, Lycos, Excite, etc.).
17.07 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, PDF, etc.).
17.08 Identify effective BOOLEAN search strategies.

18.0 Demonstrate proficiency using HTML commands – The student will be able to:
18.01 Identify elements of a web page.
18.02 Describe individual web page layouts and content (e.g., writing for the web, web structure).
18.03 Define basic html terminology.
18.04 Analyze html source code developed by others.
18.05 Create web pages using basic HTML tags (e.g., links, lists, character styles, text alignment, tables).
18.06 Use storyboarding techniques for subsequent web pages (e.g., linear, hierarchical).
18.07 Edit and test html documents for accuracy and validity.
18.08 Use basic functions of WYSIWYG editors.
18.09 Use basic functions of HTML, DHTML, and XML editors and converters.
18.10 Enhance web pages through the addition of images and graphics including animation.

19.0 Demonstrate proficiency in page design applicable to the WWW – The student will be able to:
19.01 Develop an awareness of acceptable web page design, including index pages in relation to the rest of the web site.
19.02 Describe and apply color theory as it applies to web page design (e.g., background and text color).
19.03 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD Rom's).
19.04 Use image design software to create and edit images.
19.05 Demonstrate proficiency in publishing to the internet.
19.06 Demonstrate proficiency in adding downloadable forms to web pages.
19.07 Explain the need for web-based applications.

20.0 Demonstrate proficiency using specialized web design software -- The student will be able to:

20.01 Compare and contrast various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).
20.02 Demonstrate proficiency using use of various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).

21.0 Develop an awareness of the information technology industry -- The student will be able to:

21.01 Explain how information technology impacts the operation and management of business and society.
21.02 Explain the emergence of e-commerce and e-government and the potential impact on business and society.
21.03 Explain the emergence of a paperless society.

22.0 Develop an awareness of microprocessors and digital computers -- The student will be able to:

22.01 Describe the evolution of the digital computer.
22.02 Explain the general architecture of a microcomputer system.
22.03 Explain the evolution of microprocessors.
22.04 Explain software hierarchy and its impact on microprocessors.
22.05 Explain the need for and use of peripherals.
22.06 Demonstrate proficiency using peripherals.
22.07 Identify the basic concepts of computer maintenance and upgrades.
22.08 Differentiate between diagnosing and troubleshooting.

23.0 Develop an awareness of programming languages -- The student will be able to:

23.01 Explain the history of programming languages.
23.02 Explain the need for and use of compilers.
23.03 Explain how compilers work.
23.04 Identify the three types of programming design approaches (e.g., top-down, structured and object-oriented).

14.0 Develop an awareness of emerging technologies -- The student will be able to:

14.01 Compare and contrast various methods of evaluation for emerging technologies.
14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
14.03 Compare and contrast emerging technologies and describe how they impact business in the global marketplace (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

24.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model -- The student will be able to:

24.01 Identify how types of networks and how they work.
24.02 Identify the role of servers and clients on a network.
24.03 Identify benefits and risks of networked computing.
24.04 Identify the relationship between computer networks and other communications networks (i.e. Telephone systems).
24.05 Identify intranets, extranets and how they relate to the internet.
24.06 Demonstrate basic understanding of network administration.
24.07 Describe the evolution of OSI from its inception to the present and into the future.

24.08 Explain the interrelations of the seven layers of the Open Systems Interface (OSI) as it relates to hardware and software.

25.0 Demonstrate proficiency using common software applications -- The student will be able to:

25.01 Compare and contrast the appropriate use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, java applet, music, etc.).

25.02 Demonstrate proficiency in the use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, java applet, music, etc.).

26.0 Demonstrate proficiency using specialized software applications -- The student will be able to:

26.01 Compare and contrast the appropriate use of specialized software applications (e.g., (OLTP, computer aided design, computer aided manufacturing, 3D animation process control, materials management, etc.).

26.02 Demonstrate awareness of specialized software applications (e.g., OLTP, computer aided design, computer aided manufacturing, 3D animation, process control, materials management, etc.)

26.03 Demonstrate the ability to incorporate digital sound.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Design 1**
Course Number: **8209510**
Course Credit: **1**

Course Description:

This course is designed to develop basic entry-level skills required for careers in the digital publishing industry. The content includes computer skills; digital publishing concepts and operations; layout, design, measurement activities; and digital imaging as well as communication, collaboration & decision-making activities; critical thinking; and problem solving. After successful completion of Digital Design 1 students will have met Occupational Completion Point - B, Production Assistant - SOC Code 43-9031.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:
- 02.01 Collaborate with individuals and teams to complete tasks
- 02.02 Apply the writing process to the creation of appropriate documents following designated business formats.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- The student will be able to:

- 08.01 Analyze job and career requirements and relate career interests to opportunities in the global economy.
- 08.02 Identify the skills, education, and training required for the digital publishing industry
- 08.03 8.04 Prepare a hard-copy portfolio
- 08.04 8.05 Prepare an electronic portfolio

15.0 Participate in work-based learning experiences — The student will be able to:
- 15.01 Participate in work-based learning experiences in a digital publishing environment.
- 15.02 Discuss the use of technology in a digital publishing environment.
- 15.03 Conceptualize a design solution to address a client’s needs

28.0 Demonstrate knowledge of digital publishing concepts — The student will be able to:
- 28.01 Identify the skills needed by a digital designer.
- 28.02 Define commonly used terms in graphic communications.
- 28.03 Identify characteristics of paper.
- 28.04 Identify different kinds of color (e.g., spot, process CMYK, RGB).
- 28.05 Identify software used in digital publishing.
- 28.06 Demonstrate knowledge of copyright laws.

29.0 Perform decision-making activities — The student will be able to:
- 29.01 Determine work priorities
- 29.02 Evaluate information to be used and choose relevant material.
- 29.03 Determine the audience.
- 29.04 Recognize and maintain ethical standards.

30.0 Perform layout, design, and measurement activities — The student will be able to:
  30.01 Identify characteristics of type, type families, type series, and type styles.
  30.02 Prepare rough layout designs.
  30.03 Identify and apply elements of design.
  30.04 Identify and apply principles of design
  30.05 Produce projects using white space.
  30.06 Design a document using grids and formats.

31.0 Demonstrate proficiency in digital publishing operations — The student will be able to:
  31.01 Complete projects using a variety of fonts, sizes, leading, and alignments.
  31.02 Utilize appropriate font management techniques (e.g., TrueType, postscript, install and remove fonts
  31.03 Output projects using a variety of devices (e.g., printers, scanners, image setters).
  31.04 Design with type using kerning, tracking, horizontal/vertical scale, baseline shift, etc.
  31.05 Produce projects using tables.
  31.06 Assemble multipage documents.
  31.07 Create documents that use master pages.
  31.08 Use a variety of styles to produce effective layouts.
  31.09 Produce a document using printer and reader spreads.
  31.10 Use publishing software to create a pre-press profile.
  31.11 Produce a variety of designs using layout/paste-up software.

32.0 Demonstrate proficiency in digital imaging — The student will be able to:
  32.01 Demonstrate proper use of a scanner/input devices/digital cameras.
  32.02 Crop and scale photographs and line art electronically.
  32.03 Demonstrate an understanding of formats and modes (e.g., EPS, TIFF, PICT, BMP, GIF, PNG JPEG, ASCII, CRW, PDF binary.
  32.04 Demonstrate use of image editing software.
  32.05 Proofread electronically and manually.
  32.06 Produce electronically retouched photographs.
  32.07 Create PDF files.
  32.08 Demonstrate proficiency in saving documents to various storage media (e.g. locally, CD, DVD, USB)

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Design 2**
Course Number: **8209520**
Course Credit: **1**

Course Description:

This course continues the development of basic entry-level skills required for careers in the digital publishing industry. The content includes computer skills; digital publishing operations; layout, design, and measurement activities;; and digital imaging as well as communication, collaboration & decision-making activities; critical thinking; and problem solving. After successful completion of Digital Design 2 and 3, students will have met Occupational Completion Point -C, Digital Assistant Designer - SOC Code 43-9031.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:
- 02.01 Collaborate with individuals and teams to complete tasks
- 02.02 Apply the writing process to the creation of appropriate documents following designated business formats.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals — The student will be able to:
- 09.01 Prepare a hard copy portfolio.
- 09.02 Prepare an electronic portfolio
- 09.03 Present a portfolio to an audience.
- 09.04 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.
- 09.05 Develop and maintain an electronic career portfolio, to include, but not limited to the resume and letter of application

15.0 Participate in work-based learning experiences — The student will be able to:
- 15.01 Participate in work-based learning experiences in a digital publishing environment.
- 15.02 Compare and contrast the software applications used in a digital publishing environment.
- 15.03 Conceptualize a design solution to address a client’s needs

29.0 Perform decision-making activities — The student will be able to:
- 29.01 Determine work priorities
- 29.02 Evaluate information to be used and choose relevant material.
- 29.03 Determine the audience.
- 29.04 Recognize and maintain ethical standards.

31.0 Demonstrate proficiency in digital publishing operations — The student will be able to:
- 31.01 Produce multiple color designs using different color techniques including process color and spot color.
- 31.02 Prepare output files using pre-press preparations (e.g., color separation, font management, file management, use of postscript fonts, etc.)

31.03 Read work orders and prepare electronic files that meet all specifications.
31.04 Design a document using grids and formats.
31.05 Produce documents integrating elements and principles of design.
31.06 Demonstrate proficiency in the use of a vector based illustration program.
31.07 Demonstrate proficiency in the use of a vector based animation program
31.08 Demonstrate proficiency in saving documents to various storage media (e.g. locally, CD, DVD, USB

32.0 Demonstrate proficiency in digital imaging — The student will be able to:
32.01 Complete projects using proper resolution and screen values (e.g., PPI, LPI, DPI).
32.02 Produce electronically retouched photographs. ,
32.03 Produce projects using a digital camera.

33.0 Demonstrate proficiency in multimedia presentation — The student will be able to:
33.01 Create PDF files.
33.02 Incorporate audio and video into a presentation

46.0 Demonstrate promotion applications for the selected marketing industry--The student will be able to:
46.01 Identify types of promotion used in the industry.
46.02 Discuss importance of advertising media.
46.03 Use design principles in preparing promotional messages
46.04 Write a promotional message to appeal to a target market.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Design 3**
Course Number: **8209530**
Course Credit: **1**

Course Description:

This course continues the development of industry-standard skills required for careers in the digital publishing industry. The content includes the use of a variety of software and equipment to perform digital publishing and digital imaging activities as well as communication, collaboration & decision-making activities; critical thinking; and problem solving. After successful completion of Digital Design 3, students will have met Occupational Completion Point -C, Digital Assistant Designer - SOC Code 43-90331.

02.0 Demonstrate comprehension and communication skills -- The student will be able to:
- 02.01 Collaborate with individuals and teams to complete tasks
- 02.02 Apply the writing process to the creation of appropriate documents following designated business formats.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals — The student will be able to:
- 09.01 Prepare a hard portfolio.
- 09.02 Prepare an electronic portfolio
- 09.03 Present a portfolio to an audience.
- 09.04 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.
- 09.05 Develop and maintain an electronic career portfolio, to include, but not limited to the resume and letter of application.

15.0 Participate in work-based learning experiences — The student will be able to:
- 15.01 Participate in work-based learning experiences in a digital publishing environment.
- 15.02 Compare and contrast the software applications used in a digital publishing environment.
- 15.03 Conceptualize a design solution to address a client's needs

19.0 Demonstrate proficiency in page design applicable to the WWW – The student will be able to:
- 19.01 Develop an awareness of acceptable web page design, including index pages in relation to the rest of the web site.
- 19.02 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD Rom's).
- 19.03 Use image design software to create and edit images.
- 19.04 Demonstrate proficiency in publishing to the internet.
- 19.05 Demonstrate proficiency in adding downloadable forms to web pages.

20.0 Demonstrate proficiency using specialized web design software -- The student will be able to:

- 20.01 Compare and contrast various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).
- 20.02 Demonstrate proficiency using use of various specialized web design software (e.g., Flash, Shockwave, GoLive, Director, etc.).

29.0 Perform decision-making activities — The student will be able to:

- 29.01 Determine work priorities
- 29.02 Evaluate information to be used and choose relevant material.
- 29.03 Determine the audience.
- 29.04 Recognize and maintain ethical standards.

32.0 Demonstrate proficiency in digital imaging — The student will be able to:

- 32.01 Produce projects using a digital camera.
- 32.02 Scan multiple documents.
- 32.03 Crop and scale photographs electronically using a scanner.
- 32.04 Apply the use of proper resolution and screen values (e.g., ppi, lpi, dpi in documents).
- 32.05 Produce electronically retouched photographs using tones, hues, and values.
- 32.06 Apply special effects to image files.
- 32.07 Demonstrate proficiency in saving documents to various storage media (e.g. locally, CD, DVD, USB)

34.0 Demonstrate proficiency in multimedia presentation — The student will be able to:

- 34.01 Demonstrate proficiency using a PDF format for a multimedia presentation.
- 34.02 Incorporate audio and video into a presentation
- 34.03 Demonstrate proficiency using 2D and 3D animation and effects

46.0 Demonstrate promotion applications for the selected marketing industry--The student will be able to:

- 46.01 Identify types of promotion used in the industry.
- 46.02 Discuss importance of advertising media.
- 46.03 Use advertising guidelines to design appropriate media sample ads, i.e., print, radio, television, Internet, and others.
- 46.04 Use design principles in preparing promotional messages
- 46.05 Write a promotional message to appeal to a target market.
- 46.06 Design a web site to promote a product/service.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Digital Design 4**
Course Number:	**8209540**
Course Credit:	**1**

Course Description:

This course is designed to develop advanced industry-standard skills required for careers in the digital publishing industry. The content includes the use of a variety of software and equipment, including digital video cameras and video/audio editing software. After successful completion of Digital Design 4 and 5, students will have met Occupational Completion Point - D, Graphic Designer - SOC Code 27-1014.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals — The student will be able to:
  09.01 Prepare a portfolio.
  09.02 Create an electronic resume.
  09.03 Create an electronic portfolio.
  09.04 Present a portfolio to an audience.

31.0 Demonstrate proficiency in digital publishing operations — The student will be able to:
  31.01 Produce designs integrating all elements of design.
  31.02 Produce vector illustrations using digital software
  31.03 Produce multiple projects using a variety of digital software
  31.04 Prepare output files using pre-press protocols (e.g., color separation, font management, file management, use of postscript fonts, etc.).
  31.05 Perform integrated functions using various design software applications.
  31.06 Create documents using advanced features in layout/paste-up software.
  31.07 Produce multiple color designs using proper color balance for presentation.
  31.08 Create electronic presentations

32.0 Demonstrate proficiency in digital imaging — The student will be able to:
  32.01 Produce projects using line art, grayscale, duotone, and four-color process.
  32.02 Emphasize, interpret, and establish mood and emotion using illustrations.
  32.03 Apply special effects to projects.

33.0 Demonstrate proficiency in multimedia presentation — The student will be able to:
  33.01 Create PDF files.
  33.02 Create links.
  33.03 Optimize images for the Web (e.g., file size, transmission time).
  33.04 Build pages for media presentations and standards.
  33.05 Link media elements into Web-delivered documents.
  33.06 Create buttons.
  33.07 Create dynamic media projects
  33.08 Create presentations using color effects
  33.09 Select appropriate fonts for on-screen presentations
  33.10 Generate presentations with fully integrated text and images

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Design 5**
Course Number: **8209550**
Course Credit: **1**

Course Description:

This course continues the development of advanced industry-standard skills required for careers in the digital publishing industry. The content includes the use of a variety of software and equipment used to create multimedia presentations. After successful completion of Digital Design 4 and 5, students will have met Occupational Completion Point - D, Graphic Designer - SOC Code 27-1014.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals — The student will be able to:
    09.01 Prepare a portfolio.

15.0 Participate in work-based learning experiences — The student will be able to:
    15.01 Participate in work-based learning experiences in a digital publishing environment.
    15.02 Discuss the management/supervisory skills needed in a digital publishing environment.

31.0 Demonstrate proficiency in digital publishing operations — The student will be able to:
    31.01 Produce designs integrating all elements of design.
    31.02 Produce vector illustrations using digital software
    31.03 Produce multiple projects using a variety of digital software
    31.04 Prepare output files using pre-press protocols (e.g., color separation, font management, file management, use of postscript fonts, etc.).
    31.05 Perform integrated functions using various design software applications.
    31.06 Create documents using advanced features in layout/paste-up software.
    31.07 Produce multiple color designs using proper color balance for presentation.
    31.08 Create electronic presentations.

33.0 Demonstrate proficiency in multimedia presentation — The student will be able to:
    33.07 Create PDF files.
    33.08 Create links.
    33.09 Optimize images for the Web (e.g., file size, transmission time).
    33.10 Build pages for media presentations and standards.
    33.11 Link media elements into Web-delivered documents.
    33.12 Create buttons.
    33.13 Create dynamic media projects
    33.14 Create presentations using color effects

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Digital Design 6**
Course Number:	**8209560**
Course Credit:	**1**

Course Description:

This course continues the development of industry-standard skills required for careers in the digital publishing industry. The content includes the use of a variety of software and equipment required to perform digital publishing and digital imaging activities. After successful completion of Digital Design 6 and 7, students will have met Occupational Completion Point – E, Media Designer - SOC Code 27-1024.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
    09.01 Create an electronic resume.
    09.02 Prepare a portfolio.
    09.03 Create an electronic portfolio.

15.0 Participate in work-based learning experiences — The student will be able to:
    15.01 Participate in work-based learning experiences in a digital publishing environment.
    15.02 Compare and contrast the software applications used in a digital publishing environment.

33.0 Demonstrate proficiency in multimedia presentation — The student will be able to:
    33.01 Select appropriate fonts for on-screen presentation.
    33.02 Generate presentations with fully integrated text and images text and images.
    33.03 Demonstrate proficiency using 2D and 3D animation and effects

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Design 7**
Course Number: **8209570**
Course Credit: **1**

Course Description:

This course is designed to develop advanced industry-standard skills required for careers in the digital design industry. The content includes the use of a variety of software and equipment, including digital video cameras and video/audio editing software. After successful completion of Digital Design 6 and 7, students will have met Occupational Completion Point – E, Media Designer - SOC Code 27-1024

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
09.01 Create an electronic resume.
09.02 Prepare a portfolio.
09.03 Create an electronic portfolio.
09.04 Present a portfolio to an audience.

33.0 Demonstrate proficiency in multimedia presentation — The student will be able to:
33.01 Select appropriate fonts for on-screen presentation.
33.02 Generate presentations with fully integrated text and images.
33.03 Create PDF files.
33.04 Create links.
33.05 Optimize images for the Web (e.g., file size, transmission time).
33.06 Build pages for media presentations and standards.
33.07 Link media elements into Web-delivered documents
33.08 Create presentations using color effects

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Family and Consumer Sciences Directed Study**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary – Career Preparatory
Program Number	8500100
CIP Number	0420.999901
Grade Level	9-12, 30, 31
Standard Length	Multiple Credits
Teacher Certification	VOC HME EC @4 HOME EC 1 @2 FAM CON SC 1 GEN HME EC @2 ANY HOME EC ED G PRESCH ED A E CHILD ED 2 QUAN FOOD ¢7 @7G PK PRIMARY H PRIMARY ED B SC FOOD SV @ 6
CTSO	FCCLA
SOC Codes (all applicable)	N/A
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

This course may be taken only by a student who has completed, or is currently completing, all of the courses prescribed in the Course Code Directory for a specific secondary job preparatory program and needs additional study in this program. A student may earn multiple credits in this course.

The purpose of this course is to provide students with additional competencies in a Family and Consumer Sciences program that will enhance their opportunities for employment in the occupation chosen by the student.

The content is prescribed by the instructor based upon the individual student's assessed needs for directed study.

Program Structure

This program is a planned sequence of instruction consisting of multiple credits

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Perform designated job skills.
02.0 Demonstrate language arts knowledge and skills
03.0 Demonstrate mathematics knowledge and skills.
04.0 Demonstrate science knowledge and skills
05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
06.0 Solve problems using critical thinking skills, creativity and innovation.
07.0 Use information technology tools
08.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
09.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
10.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
11.0 Describe the importance of professional ethics and legal responsibilities.
12.0 Explain the importance of employability and entrepreneurship skills
13.0 Demonstrate personal money-management concepts, procedures, and strategies

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Family and Consumer Sciences Directed Study**
Course Number: **8500100**
Course Credit: **Multiple**

Course Description:

01.0 Perform designated job skills--The student will be able to:
- 01.01 Demonstrate job performance skills.
- 01.02 Follow prescribed safety procedures.
- 01.03 Display increasingly higher levels of productivity.

02.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0
- 02.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 02.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 02.03 Present information formally and informally for specific purposes and audiences. AF2.9

03.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0
- 03.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills. **--** The students will be able to: AF4.0
- 04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

COMMUNICATIONS:

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:
- 05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 05.02 Locate, organize and reference written information from various sources. CM 3.0
- 05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 05.05 Apply active listening skills to obtain and clarify information. CM 7.0

05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

PROBLEM-SOLVING AND CRITICAL THINKING:

06.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:

06.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
06.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
06.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
06.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

INFORMATION TECHNOLOGY APPLICATIONS:

07.0 Use information technology tools. -- The students will be able to:

07.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
07.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
07.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
07.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

SYSTEMS:

08.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:

08.01 Describe the nature and types of business organizations. SY 1.0
08.02 Explain the effect of key organizational systems on performance and quality.
08.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
08.04 Explain the impact of the global economy on business organizations.

SAFETY, HEALTH AND ENVIRONMENTAL:

09.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:

09.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0

09.02 Explain emergency procedures to follow in response to workplace accidents.
09.03 Create a disaster and/or emergency response plan. SHE 2.0

LEADERSHIP AND TEAMWORK:

10.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:
10.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
10.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
10.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
10.04 Employ mentoring skills to inspire and teach others. LT 5.0

ETHICS AND LEGAL RESPONSIBILITIES:

11.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:
11.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
11.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
11.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
11.04 Interpret and explain written organizational policies and procedures. ELR 2.0

EMPLOYABILITY AND CAREER DEVELOPMENT:

12.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:
12.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
12.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
12.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
12.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
12.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
12.06 Identify and exhibit traits for retaining employment. ECD 7.0
12.07 Identify opportunities and research requirements for career advancement. ECD 8.0
12.08 Research the benefits of ongoing professional development. ECD 9.0
12.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

FINANCIAL LITERACY:

13.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:

- 13.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 13.02 Describe the effect of money management on personal and career goals. FL 3.0
- 13.03 Develop a personal budget and financial goals. FL3.1
- 13.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 13.05 Maintain financial records. FL3.3
- 13.06 Read and reconcile financial statements. FL3.4
- 13.07 Research, compare and contrast investment opportunities.

2011 – 2012

Florida Department of Education
Curriculum Framework

Program Title: **Fabric Construction**
Program Type: **Non Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary – Non Career Preparatory
Program Number	8500380
CIP Number	0920.011IPA
Grade Level	9-12 30, 31
Standard Length	5 Credit
Teacher Certification	HOME EC @ 2 VOC HME EC @4 FAM CON SC 1
CTSO	FCCLA
Facility Code	231 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)

Purpose

The purpose of this program is to give students an opportunity to apply knowledge and skills related to the area of Arts and A V Technology.

This course is designed to prepare students to identify the characteristics of fibers, fabrics and textiles; to interpret consumer protection laws related to clothing, textiles, and home décor items; and to construct garments and/or home décor items.

Program Structure

The following table illustrates the program structure:

Course Number	Course Title	Length	Level
8500380	Fabric Construction	.5 Credit	2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum cannot be modified.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Identify characteristics, uses, costs and care of textiles and fabrics.
02.0 Demonstrate clothing construction skills.
03.0 Demonstrate home décor/furnishings construction skills.
04.0 Demonstrate language arts knowledge and skills
05.0 Demonstrate mathematics knowledge and skills.
06.0 Demonstrate science knowledge and skills
07.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
08.0 Solve problems using critical thinking skills, creativity and innovation.
09.0 Use information technology tools
10.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
11.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
12.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
13.0 Describe the importance of professional ethics and legal responsibilities.
14.0 Explain the importance of employability and entrepreneurship skills
15.0 Demonstrate personal money-management concepts, procedures, and strategies.

.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Fabric Construction**
Course Number:	**8500380**
Course Credit:	**.5**

Course Description:

01.0 Identify characteristics, uses, costs, and care of textiles and fabrics--The student will be able to:

- 01.01 Identify the characteristics, uses, costs, and care of natural and man-made fibers.
- 01.02 Identify the characteristics, uses, costs, and care of fabric blends and fabric finishes.
- 01.03 Identify methods of constructing fabrics.
- 01.04 Identify the characteristics, uses, costs, and care of various fabrics.
- 01.05 Explain the expected performance of selected fabrics according to yarn type, fabric construction and textile finishes used to make them.
- 01.06 Identify the four basic purposes of labeling textile products.
- 01.07 Identify the differences between hangtags and labels.
- 01.08 Identify and interpret consumer protection laws related to clothing and textiles.

02.0 Demonstrate clothing construction skills--The student will be able to:

- 02.01 Use and care for sewing tools and equipment.
- 02.02 Follow correct procedures for measuring the body.
- 02.03 Determine figure type and pattern size from body measurements.
- 02.04 Identify factors to consider when selecting patterns and fabrics for garments.
- 02.05 Determine yardage and notion needs from information on pattern envelope.
- 02.06 Identify and interpret symbols and markings found on pattern pieces.
- 02.07 Prepare fabric for layout.
- 02.08 Pin, cut and mark garment pieces using a pattern.
- 02.09 Demonstrate construction techniques for interfacing, facings, waistbands, zippers, buttonholes, sleeves, collars, etc.
- 02.10 Interpret and follow guide sheet to construct garments.
- 02.11 Demonstrate appropriate pressing techniques.

03.0 Demonstrate home décor/furnishings construction skills – The student will be able to:

- 03.01 Distinguish the difference between home décor/furnishings and garment construction.
- 03.02 Follow correct measuring techniques for home décor items.
- 03.03 Identify factors to consider when selecting patterns and fabrics for home décor/furnishings items.
- 03.04 Determine yardage and notion needs.
- 03.05 Identify and interpret symbols and markings found on pattern pieces.
- 03.06 Prepare fabric for layout.
- 03.07 Pin, cut, and mark fabric pieces.
- 03.08 Demonstrate construction techniques involved in the construction of pillows, curtains/drapes, wall hangings, placemats/napkins/tablecloths/table runners, etc.
- 03.09 Interpret and follow guide sheet to construct home décor/furnishings items.

03.10 Demonstrate appropriate pressing techniques.

04.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0

04.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4

04.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5

04.03 Present information formally and informally for specific purposes and audiences. AF2.9

05.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0

05.01 Demonstrate knowledge of arithmetic operations. AF3.2

05.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4

05.03 Construct charts/tables/graphs using functions and data. AF3.5

06.0 Demonstrate science knowledge and skills. -- The students will be able to: AF4.0

06.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1

06.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

07.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:

07.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0

07.02 Locate, organize and reference written information from various sources. CM 3.0

07.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0

07.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0

07.05 Apply active listening skills to obtain and clarify information. CM 7.0

07.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0

07.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

08.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:

08.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0

08.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0

08.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0

08.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

09.0 Use information technology tools. -- The students will be able to:

09.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0

09.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0

09.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0

09.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

10.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:

10.01 Describe the nature and types of business organizations. SY 1.0
10.02 Explain the effect of key organizational systems on performance and quality.
10.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
10.04 Explain the impact of the global economy on business organizations.

11.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:

11.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
11.02 Explain emergency procedures to follow in response to workplace accidents.
11.03 Create a disaster and/or emergency response plan. SHE 2.0

12.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:

12.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
12.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
12.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
12.04 Employ mentoring skills to inspire and teach others. LT 5.0

13.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:

13.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
13.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
13.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
13.04 Interpret and explain written organizational policies and procedures. ELR 2.0

14.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:

14.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
14.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
14.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
14.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
14.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
14.06 Identify and exhibit traits for retaining employment. ECD 7.0
14.07 Identify opportunities and research requirements for career advancement. ECD 8.0
14.08 Research the benefits of ongoing professional development. ECD 9.0
14.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

15.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:

15.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
15.02 Describe the effect of money management on personal and career goals. FL 3.0
15.03 Develop a personal budget and financial goals. FL3.1
15.04 Complete financial instruments for making deposits and withdrawals. FL3.2
15.05 Maintain financial records. FL3.3
15.06 Read and reconcile financial statements. FL3.4
15.07 Research, compare and contrast investment opportunities.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Family and Consumer Sciences Cooperative OJT**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8500410	V209999
CIP Number	0420.9999CP	0420.9999CP
Grade Level	9-12, 30, 31	30, 31
Standard Length	Multiple Credits	Multiple Hours
Teacher Certification	HOMEMAKING @2 ¢7 GEN HME EC @2 @4 HOME EC 1 @2 VOC HME EC @4 ANY HOME EC ED/TC COOP ED E G PK PRIMARY H PRESCH ED A PRIMARY ED B E CHILD ED @ 0 QUAN FOOD ¢7 @7G SC FOOD SV@6 FAM CON SC 1	HME EC OCC ¢7 @7 G VOC HME EC @4 @2 HOMEMAKING ¢7@7@2G HOME EC 1 @2 GEN HME EC @2 @4 FAM CON SC 1 PK PRIMARY H PRESCH ED A PRIMARY ED B E CHILD ED @ 0 QUAN FOOD ¢7 @7G SC FOOD SV@6 FAM CON SC 1
CTSO	FCCLA	FCCLA
SOC Codes (all applicable)	N/A	N/A
Facility Code	N/A - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	N/A

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this course is to provide the on-the-job training component when the **cooperative method of instruction** is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training agreement, a training plan signed by the student, teacher and employer, including instructional objectives and a list of on-the-job and in-school learning experiences and a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student **must be paid** for work performed.

For the on-the-job training component, the following is required for each student: a training plan, signed by the student, teacher and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed. It is recommended that for every twenty students (or portion thereof) enrolled in the program, the teacher-coordinator be given a minimum of one hour of OJT-coordination release time per day so that he/she can visit students on the job to manage the cooperative method of instruction effectively.
The teacher/coordinator must visit each job site a minimum of once during each grading period for the purpose of evaluating the student's progress in attaining the competencies listed in the training plan.

In order for this program/course to be transferable between institutions, it must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System Discipline Committee. Transferability is not automatic. An institution wishing to participate in the transfer articulation of this program/course must submit documentation to the Statewide Course Numbering System concerning the program. The documentation should include a program outline, textbook information, and information concerning other materials, or equipment used in the course/program.

Cooperative Family and Consumer Sciences Education - OJT may be taken by a student for one or more semesters. A student may earn multiple credits in this course. The specific student performance standards which the student must achieve to earn credit are specified in the Cooperative Education - OJT Training Plan.

Program Structure

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics N/A, Language N/A and Reading N/A These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Perform designated job skills.
02.0 Demonstrate language arts knowledge and skills
03.0 Demonstrate mathematics knowledge and skills.
04.0 Demonstrate science knowledge and skills
05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
06.0 Solve problems using critical thinking skills, creativity and innovation.
07.0 Use information technology tools
08.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
09.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
10.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
11.0 Describe the importance of professional ethics and legal responsibilities.
12.0 Explain the importance of employability and entrepreneurship skills
13.0 Demonstrate personal money-management concepts, procedures, and strategies

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Family and Consumer Sciences Cooperative – OJT**
PSAV Number: **V209999**

Course Credit: **Multiple Hours**

01.0 Perform designated job skills--The student will be able to:
  01.01 Perform tasks as outlined in the training plan.
  01.02 Demonstrate job performance skills.
  01.03 Demonstrate safety procedures on the job.
  01.04 Maintain appropriate records.
  01.05 Attain an acceptable level of productivity.
  01.06 Demonstrate appropriate dress and grooming habits.

02.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0
  02.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
  02.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
  02.03 Present information formally and informally for specific purposes and audiences. AF2.9

03.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0
  03.01 Demonstrate knowledge of arithmetic operations. AF3.2
  03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
  03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills. **--** The students will be able to: AF4.0
  04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
  04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:
  05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
  05.02 Locate, organize and reference written information from various sources. CM 3.0
  05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
  05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
  05.05 Apply active listening skills to obtain and clarify information. CM 7.0
  05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
  05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

06.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:

- 06.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 06.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 06.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 06.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

07.0 Use information technology tools. -- The students will be able to:

- 07.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
- 07.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 07.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 07.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

08.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:

- 08.01 Describe the nature and types of business organizations. SY 1.0
- 08.02 Explain the effect of key organizational systems on performance and quality.
- 08.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 08.04 Explain the impact of the global economy on business organizations.

09.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:

- 09.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 09.02 Explain emergency procedures to follow in response to workplace accidents.
- 09.03 Create a disaster and/or emergency response plan. SHE 2.0

10.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:

- 10.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 10.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 10.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 10.04 Employ mentoring skills to inspire and teach others. LT 5.0

11.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:

- 11.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 11.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 11.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

11.04 Interpret and explain written organizational policies and procedures. ELR 2.0

12.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:

12.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
12.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
12.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
12.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
12.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
12.06 Identify and exhibit traits for retaining employment. ECD 7.0
12.07 Identify opportunities and research requirements for career advancement. ECD 8.0
12.08 Research the benefits of ongoing professional development. ECD 9.0
12.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

13.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:

13.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
13.02 Describe the effect of money management on personal and career goals. FL 3.0
13.03 Develop a personal budget and financial goals. FL3.1
13.04 Complete financial instruments for making deposits and withdrawals. FL3.2
13.05 Maintain financial records. FL3.3
13.06 Read and reconcile financial statements. FL3.4
13.07 Research, compare and contrast investment opportunities.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Family and Consumer Sciences Cooperative OJT**
Course Number: **8500410**
Course Credit: **Multiple**

Course Description:

01.0 Perform designated job skills--The student will be able to:
- 01.01 Perform tasks as outlined in the training plan.
- 01.02 Demonstrate job performance skills.
- 01.03 Demonstrate safety procedures on the job.
- 01.04 Maintain appropriate records.
- 01.05 Attain an acceptable level of productivity.
- 01.06 Demonstrate appropriate dress and grooming habits.

02.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0
- 02.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 02.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 02.03 Present information formally and informally for specific purposes and audiences. AF2.9

03.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0
- 03.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills. **--** The students will be able to: AF4.0
- 04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:
- 05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 05.02 Locate, organize and reference written information from various sources. CM 3.0
- 05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 05.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

06.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:
06.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
06.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
06.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
06.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

07.0 Use information technology tools. -- The students will be able to:
07.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
07.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
07.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
07.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

08.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:
08.01 Describe the nature and types of business organizations. SY 1.0
08.02 Explain the effect of key organizational systems on performance and quality.
08.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
08.04 Explain the impact of the global economy on business organizations.

09.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:
09.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
09.02 Explain emergency procedures to follow in response to workplace accidents.
09.03 Create a disaster and/or emergency response plan. SHE 2.0

10.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:
10.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
10.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
10.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
10.04 Employ mentoring skills to inspire and teach others. LT 5.0

11.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:
11.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
11.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
11.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

11.04 Interpret and explain written organizational policies and procedures. ELR 2.0

12.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:

12.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
12.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
12.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
12.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
12.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
12.06 Identify and exhibit traits for retaining employment. ECD 7.0
12.07 Identify opportunities and research requirements for career advancement. ECD 8.0
12.08 Research the benefits of ongoing professional development. ECD 9.0
12.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

13.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:

13.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
13.02 Describe the effect of money management on personal and career goals. FL 3.0
13.03 Develop a personal budget and financial goals. FL3.1
13.04 Complete financial instruments for making deposits and withdrawals. FL3.2
13.05 Maintain financial records. FL3.3
13.06 Read and reconcile financial statements. FL3.4
13.07 Research, compare and contrast investment opportunities.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Fashion Design Services**
(Note Change to: Fashion Technology and Design Services 2012-2013)
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	**PSAV**
Program Number	8506400	V200400
CIP Number	0420030605	0420030605
Grade Level	9-12, 30, 31	30, 31
Standard Length	4 Credits	600 Hours
Teacher Certification	VOC HME EC @2 @4 HME EC OCC ¢7 HOMEMAKING @2 ¢7 HOME EC @2 FAM CON SC 1 GEN HME EC @2 @4 TAILORING ¢7 APPRL MFG ¢7 @7G TEC ED 1 @2 I ART-TEC WT G I ART-TEC ¢7	VOC HME EC @2 @4 HOME EC @2 FAM CON SC 1 GEN HME EC @2 HME EC OCC ¢7@7 G HOMEMAKING ¢7 @2 @7G TAILORING ¢7 @7G APPRL MFG ¢7 @7G TEC ED 1 @2 1 ART-TEC ¢7 I ART-TEC WT G
CTSO	FCCLA	FCCLA
SOC Codes (all applicable)	41-2031 51-6052 51-6092 27-1022	41-2031 51-6052 51-6092 27-1022
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The Fashion Design Services program is designed to prepare students for initial employment or continued study in the Fashion industry. This program focuses on broad transferable skills, stresses the understanding and demonstration of the following aspects of the fashion industry: planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

This program is a planned sequence of instruction consisting of a core course and three additional courses. Students must complete the core before advancing to the other courses in the program. The core provides the foundation and basic skills that will enable the student to progress to the advanced courses in the program. The core course (8506405/HEV0010) is also a component of the Interior Design Services program because of the many commonalities in Fashion and Interior Design.

NOTE: The core course in this program should emphasize and include activities related to Fashion Design.

Program Structure

This program is a planned sequence of instruction consisting of four Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	HEV0010	Retail Sales	150 Hours	41-2031
B	HEV0011	Tailor, Dressmaker, Custom Sewer	150 Hours	51-6052
C	HEV0012	Fabric and Apparel Patternmakers	150 Hours	51-6092
D	HEV0013	Fashion Coordinator/Stylist	150 Hours	27-1022

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8506405	Design Services Core	1 Credit	41-2031	2
B	8506410	Principles of Fashion Design Services	1 Credit	51-6052	2
C	8506420	Pattern Design Techniques	1 Credit	51-6092	2
D	8506430	Fashion Design Specialist	1 Credit	27-1022	3

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career And Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program and are identified with special codes. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills is published on the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/rtf/essential_skills.rtf).

Basic Skills (If Applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate leadership and organizational skills
02.0 Demonstrate appropriate basic skills essential to working in occupations in design services.
03.0 Identify and exhibit employment skills.
04.0 Describe the relationship of human factors to design services.
05.0 Identify textile characteristics and care.
06.0 Select and use tools and equipment safely.
07.0 Operate and maintain a conventional and commercial/industrial sewing machine.
08.0 Select and prepare materials.
09.0 Construct a Simple Garment
10.0 Demonstrate mathematics knowledge and skills.
11.0 Demonstrate science knowledge and skills.
12.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
13.0 Develop a Fashion Portfolio
14.0 Identify employability opportunities in Fashion Design Services.
15.0 Demonstrate appropriate basic skills essential to working in occupations in Fashion Design Services.
16.0 Identify and exhibit employability skills for occupations related to Fashion Design Services.
17.0 Demonstrate an understanding of the elements and principles of design.
18.0 Demonstrate an understanding of the terminology used in the apparel industry.
19.0 Operate Specialty machines
20.0 Demonstrate skill in construction of simple garments.
21.0 Demonstrate an understanding of the importance of how eco fashion decisions impact the environment, consumer health and the working conditions of people in the fashion industry.
22.0 Demonstrate an understanding of entrepreneurship.
23.0 Demonstrate language arts knowledge and skills.
24.0 Solve problems using critical thinking skills, creativity and innovation.
25.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.

26.0 Research how fashion design is affected by history and culture.
27.0 Demonstrate sketching and free hand drawing skills.
28.0 Demonstrate an understanding of how technology is used in the fashion industry.
29.0 Identify the psychological and practical needs for clothing for special markets.
30.0 Create an original pattern for a garment.
31.0 Demonstrate alteration skills on a sample or garment
32.0 Demonstrate clothing repair on a garment or sample
33.0 Use information technology tools.
34.0 Describe the importance of professional ethics and legal responsibilities
35.0 Demonstrate personal money-management concepts, procedures, and strategies.
36.0 Identify and describe the different specialties related to Fashion Design Services: Window Display, Fashion Design Assistant, Tailor’s Assistant, Personal Shopper, and Stylist.
37.0 Select one specialty area and complete the student performance standards for that area.
38.0 (Optional) Schedule and participate in Fashion Design Services job shadowing.
39.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
40.0 Explain the importance of employability and entrepreneurship skills.
41.0 Finalize a fashion portfolio per industry standards.
42.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Fashion Design Services
PSAV Number: V200400

Course Number: HEV0010
Occupational Completion Point: A
Retail Sales – 150 Hours – SOC Code 41-2031

01.0 Demonstrate leadership and organizational skills – The student will be able to:
- 01.01 Identify professional and youth organizations.
- 01.02 Identify purposes and functions of professional and youth organizations.
- 01.03 Identify roles and responsibilities of members
- 01.04 Demonstrate cooperation as a group member in achieving organizational goals.
- 01.05 Demonstrate confidence in leadership roles and organizational responsibilities.

02.0 Demonstrate appropriate basic skills essential to working in occupations in design services – The student will be able to:
- 02.01 Identify the communication knowledge, skills, and attitudes necessary to perform the occupational tasks.
- 02.02 Demonstrate communication competencies necessary to perform the occupational tasks.

03.0 Identify and exhibit employment skills – The student will be able to:
- 03.01 Conduct a job search using the internet, media center, phone, or a computerized model.
- 03.02 Identify occupations in the garment/textile industry and the duties and responsibilities of those occupations.
- 03.03 Identify occupations in Fashion Design Services.
- 03.04 Identify personal skills and interests that may lead to a career exploration related to Fashion Design Services.
- 03.05 Identify levels of training required for occupations in Fashion Design Services.
- 03.06 Identify duties and responsibilities for occupations in Fashion Design Services.
- 03.07 Identify ways to achieve job advancement in Fashion Design Services occupations.

04.0 Describe the relationship of human factors to design services – The student will be able to:
- 04.01 Define the elements of design that are applicable to fashion and/or interior design (space, line, shape, form, texture, color).
- 04.02 Define the principles of design that are applicable to fashion and/or interior design (proportion, scale, balance, emphasis, rhythm, harmony).
- 04.03 Explain the impact of human factors (psychological, physiological, and social needs) on decisions relating to the design services process.
- 04.04 Identify and describe modifications necessary to accommodate individuals with special needs.
- 04.05 Identify and describe various garment styles, features, and parts as they related to the elements and principles of design.

05.0 Identify textile characteristics and care – After teacher demonstration, textbook/multi-media research or following sample instruction the student will be able to:
- 05.01 Identify and describe fiber characteristics.
- 05.02 Identify and describe types of fabric construction.
- 05.03 Identify and describe types of fabric finishes.
- 05.04 Identify and describe types of textiles.
- 05.05 Identify laws and regulations governing the textile industry including labeling laws.

06.0 Select and use tools and equipment safely – After teacher demonstration or textbook/multi-media research the student will be able to:
- 06.01 Identify the tools and equipment used in design services.
- 06.02 Select the appropriate tools and equipment for assigned projects.
- 06.03 Demonstrate the proper and safe use of tools and equipment, such as, but not limited to shears, rotary cutter, measuring tools, etc.
- 06.04 Identify and demonstrate safety procedures in using conventional sewing machines and home sergers.
- 06.05 Identify and demonstrate safety procedures in using pressing equipment.
- 06.06 Explain the importance of observing Occupational Safety and Health Administration (OSHA) rules and regulations.

07.0 Operate and maintain a conventional and commercial/industrial sewing machine (may need to remove since according to Lisa under 18 year olds should not be using these machines.) – After teacher demonstration, textbook/multi-media research or following manufacturer's instructions, the student will be able to:
- 07.01 Identify the parts of the sewing machine.
- 07.02 Identify the process and demonstrate needle insertion, selecting the needle that is appropriate for various fabrics.
- 07.03 Identify the steps and demonstrate threading the sewing machine.
- 07.04 Diagram and demonstrate bobbin winding, threading the bobbin case, and inserting the bobbin correctly into the sewing machine.
- 07.05 Demonstrate straight stitching.
- 07.06 Identify and demonstrate stitch length and width selection.
- 07.07 Demonstrate utility and decorative stitches.
- 07.08 Identify the tension and demonstrate tension adjustment.
- 07.09 Demonstrate cleaning and lubricating the machine following manufacturer's instructions.

08.0 Select and prepare materials– The student will be able to:
- 08.01 Identify and match pattern pieces.
- 08.02 Read and interpret instructions and specifications.
- 08.03 Identify fabric content.
- 08.04 Prepare fabric.
- 08.05 Adjust patterns following pattern directions.
- 08.06 Lay out, pin, cut, and mark fabric according to pattern directions.
- 08.07 Demonstrate stay stitching and ease stitching.
- 08.08 Lay out fabrics according to pattern/teacher instructions.
- 08.09 Match grain lines and patterns according to pattern/teacher instructions.
- 08.10 Mark fabric for assembly according to pattern/teacher instructions.
- 08.11 Mark fabric for trims according to pattern/teacher instructions.
- 08.12 Match thread with fabric synthesizing visual arts knowledge.

- 08.13 Identify, select, and use content label(s) according to fabric requirements.

09.0 Construct a simple garment – The student will be able to:
- 09.01 Construct a garment/garments that includes a seaming, waistband, darts, interfacing, seam finishing, hem, closure and pocket. Include garment (or photo) in portfolio.
- 09.02 Line up notches, dots, or clips according to pattern/teacher instructions.
- 09.03 Stitch on woven, stretch, or specialty fabrics using appropriate stitch length for fabrics.
- 09.04 Demonstrate correct pressing techniques following fabric requirements.
- 09.05 Demonstrate machine hemming following machine manual instructions.

10.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 10.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 10.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 10.03 Construct charts/tables/graphs using functions and data.
- 10.04 Take accurate measurements to determine correct size of garments or home furnishings items. AF3.5

11.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 11.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 11.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

12.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 12.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 12.02 Locate, organize and reference written information from various sources. CM 3.0
- 12.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 12.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 12.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 12.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0

13.0 Develop a Fashion Portfolio– The student will be able to
- 13.01 Assemble a portfolio including all samples:
- 13.02 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 13.03 Construct basic hand techniques
- 13.04 Stay stitching and ease stitching
- 13.05 Straight seams, clean finish and various seam finishes
- 13.06 Hemming techniques

Course Number: HEV0011
Occupational Completion Point: B
Tailor, Dressmaker, Custom Sewer – 150 Hours – SOC Code 51-6052

13.0 Develop a Fashion Portfolio– The student will be able to

13.01 Maintain a career portfolio to document knowledge, skills, and experience.

14.0 Identify employment opportunities in Fashion Design Services – The student will be able to:

14.01 Secure information about a job and advanced training opportunities for the job and report in a written or oral format.
14.02 Demonstrate computer proficiency through creating, revising, retrieving and verifying information.
14.03 Apply the principles of time management, work simplification, and teamwork when performing assigned tasks.
14.04 Demonstrate pride in the quality of work performed.
14.05 Identify career options in Fashion Design Services such as entrepreneurship.
14.06 Create a presentation on non-traditional career paths (costume design, theater, entertainment, buyers, fabric store owners etc.) in the garment/textile industry.
14.07 Analyze current trends as they may affect the future of occupations in Fashion Design Services.
14.08 Identify different earning and wage level options for occupations in Fashion Design Services.

15.0 Demonstrate appropriate basic skills essential to working in occupations in Fashion Design Services – The student will be able to:

15.01 Identify the mathematics knowledge, skills, and attitudes necessary to perform the occupational tasks.
15.02 Identify the scientific knowledge, skills, and attitudes necessary to perform the occupational tasks.
15.03 Demonstrate math competencies necessary to perform the occupational tasks.
15.04 Demonstrate scientific competencies necessary to perform the occupational tasks.
15.05 Distinguish between specifics of individual vs. mass production design needs.

16.0 Identify and exhibit employment skills for occupations related to Fashion Design Services – The student will be able to:

16.01 Identify and list documents that may be required when applying for a job.
16.02 Complete a job application form accurately.
16.03 Demonstrate competence in job interview techniques using role playing techniques.
16.04 Identify and demonstrate appropriate responses to criticism from an employer, supervisor, or co-worker.
16.05 Identify and demonstrate acceptable work habits including a positive attitude.
16.06 Demonstrate knowledge of how to make job changes appropriately.
16.07 Identify and describe acceptable employee health and hygiene habits.
16.08 Demonstrate customer relations skills synthesizing given instructions.
16.09 Develop and create a resume’ and portfolio following a given format.

17.0 Demonstrate an understanding of the elements and principles of design – After teacher demonstration, textbook/multimedia research or professional presentation, the student will be able to:

17.01 Identify and explain the elements of design and how various effects can be achieved in relation to Fashion Design Services through written/oral reporting or demonstrations: texture, pattern, line, form and shape, space, color, and light

17.02 Identify and explain the principles of design and how they can be used effectively in Fashion Design Services using a variety of research and reporting methods: proportion, scale, balance, rhythm, emphasis, and harmony.
17.03 Apply the elements and principles of design to Fashion Design Services.
17.04 Develop a project applying color and color schemes in a design.
17.05 Evaluate good design by using the laws of design.
17.06 Create Elements and Principles of Design Portfolio

18.0 Demonstrate an understanding of the terminology used in the apparel industry – The student will be able to:
18.01 Complete a research project dealing with aspects of fashion retail and production including terminology, labels, designers, manufacturers and stores used within the apparel industry.
19.0 Operate specialty machines (if available) – After a teacher demonstration the student will be able to identify and operate at least four of the following machines:
19.01 Electronic programmable machines.
19.02 Serger
19.03 Straight stitch machine
19.04 Zigzag machine
19.05 Embroidery machine

20.0 Demonstrate skill in construction of simple garments – The student will be able to:
20.01 Identify common ready to wear sizes.
20.02 Identify and describe characteristics of a properly fitted garment.
20.03 Take accurate body measurements, select pattern size, and determine figure type.
20.04 Interpret verbal, written, and visual directions.
20.05 Prepare fabric and adjust patterns following pattern directions.
20.06 Lay out, pin, cut, and mark fabric according to pattern specifications.
20.07 Demonstrate stay stitching and ease stitching.
20.08 Demonstrate stitching darts and tucks.
20.09 Identify and match garment pieces using markings and stitching following directions.
20.10 Match plaids, stripes and one-way designs following specified instructions.
20.11 Demonstrate correct pressing techniques following fabric requirements.
20.12 Demonstrate casing and elastic installation.
20.13 Demonstrate machine hemming following machine manual instructions.
20.14 Identify types of sergers and their characteristics

21.0 Demonstrate an understanding of the importance of how eco fashion decisions impact the environment, consumer health and the working conditions of people in the fashion industry.
21.01 Demonstrate an understanding of eco fashion
21.02 Identify materials that can be used to make eco friendly fashions and accessories and why these materials are eco friendly
21.03 Compare the working conditions of employees in the workplace when materials are produced following eco friendly guidelines and when they are not.
21.04 Research methods for using vegetable and plant materials for eco friendly fashions and replacing these materials back into the environment.
21.05 Describe ways to be eco friendly and the environmental and social responsibility of eco friendly methods.

21.06 Design and create an eco friendly fashion product

22.0 Demonstrate an understanding of entrepreneurship – The student will be able to:
22.01 Define entrepreneurship.
22.02 Debate the advantages and disadvantages of business ownership through a written or oral presentation.
22.03 Identify and describe, orally or in writing, the characteristics and responsibilities of an entrepreneur.
22.04 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

23.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
23.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
23.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
23.03 Present information formally and informally for specific purposes and audiences. AF2.9

24.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
24.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
24.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
24.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
24.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

25.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
25.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
25.02 Explain emergency procedures to follow in response to workplace accidents.
25.03 Create a disaster and/or emergency response plan. SHE 2.0

Program Title: **Fashion Design Services**
PSAV Number: **V200400**

Course Number: HEV0011
Occupational Completion Point: C
Fabric and Apparel Patternmakers – 150 Hours – SOC Code 51-6092

13.0 Develop a Fashion Portfolio– The student will be able to
13.01 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0

26.0 Research how fashion design is affected by history and culture – The Student will be able to:
26.01 Identify design periods from 1900 to the present day.
26.02 Explain the influence of earlier design periods on present day design.
26.03 Describe the elements and principles of design as they relate to a particular time period/culture.
26.04 Create a multi-media presentation detailing a selected design period.

27.0 Demonstrate sketching and free hand drawing skills – The student will be able to:
  27.01 Demonstrate sketching and shading techniques.
  27.02 Create inspiration boards to display the sketches and drawings.
  27.03 Select and develop a design collection according to determined criteria using sketching and shading techniques to be used in portfolio.

28.0 Demonstrate an understanding of how technology is used in the fashion industry – The student will be able to:
  28.01 Research and list software available in the area of fashion design.
  28.02 Demonstrate an understanding of how current technologies (CAD, electronic sewing, knitting, embroidery machines, sergers) are used in the creation of fashion products (e.g. fashion profiles, fabrics, garments).
  28.03 Analyze how certain technologies are used in the fashion design industry.
  28.04 Create a fashion product using two or more technologies appropriately.
  28.05 Research innovations in materials and technologies that have contributed to safeguards in the tools and equipment used in design services.
  28.06 Identify the development of tools, equipment and technology used in design services as they relate to particular historical periods.

29.0 Identify the psychological and practical needs for clothing for special markets – The student will be able to:
  29.01 List human and environmental factors that could impact a design (e.g. uniforms, clothing in non-standard sizes, clothing for people with disabilities, maternity wear, clothing for children and the elderly, protective clothing for dangerous conditions and climatic extremes, purpose-designed clothing for sports, leisure, and entertainment industries).
  29.02 Plan and implement a fashion design project based on a specific human or environmental factor.

30.0 Create an original pattern for a garment – The student will be able to:
  30.01 Plan and report on a fashion design project using established criteria.
  30.02 Using appropriate software, insert body measurements to produce a pattern.
  30.03 Create a muslin prototype of the pattern.
  30.04 Evaluate the prototype for proper fit and adjust as needed.
  30.05 Construct a specialty garment(s) according to teacher instructions - project must include a minimum number of construction skills as designated by teacher.

31.0 Demonstrate alteration skills on a sample or garment – The student will be able to:
  31.01 Remove stitches in ready-made garments without damaging fabric.
  31.02 Mark and even a hemline following guidelines.
  31.03 Lengthen and shorten hems in pants, skirts, or dresses (include cuffs and use of hem tape)
  31.04 Remove the flare from pant legs following a given set of directions.
  31.05 Taper a skirt following a given set of directions.
  31.06 Shorten the crotch rise in a garment/sample.
  31.07 Take in the waist on a man’s garment/sample.
  31.08 Take in the waist on a woman’s garment/sample.
  31.09 Take in the side seams on a blouse/shirt.
  31.10 Shorten sleeves at the cuff on a garment/sample.
  31.11 Shorten sleeves at the shoulder cap on a garment/sample.

31.12 Finish seams and press altered areas using ~~acquired~~ pressing techniques.

32.0 Demonstrate clothing repair on a garment or sample – the student will be able to:
- 32.01 Reinforce seams and buttonholes on a garment/sample.
- 32.02 Replace zippers in various types of garments/samples (including fly/jeans).
- 32.03 Apply patches on a garment/sample.
- 32.04 Replace various types of buttons on a garment/sample.
- 32.05 Demonstrate appropriate pressing techniques on repaired garments/samples.

33.0 Use information technology tools--The students will be able to:
- 33.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 33.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 33.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 33.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

34.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 34.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 34.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 34.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 34.04 Interpret and explain written organizational policies and procedures. ELR 2.0
- 34.05 Identify and exhibit traits for retaining employment.

35.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
- 35.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 35.02 Describe the effect of money management on personal and career goals. FL 3.0
- 35.03 Develop a personal budget and financial goals. FL3.1
- 35.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 35.05 Maintain financial records. FL3.3
- 35.06 Read and reconcile financial statements. FL3.4
- 35.07 Research, compare and contrast investment opportunities

Program Title: Fashion Design Services
PSAV Number: V200400

Course Number: HEV0011
Occupational Completion Point: D
Fashion Coordinator/Stylist – 150 Hours – SOC Code 27-1022

34.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 34.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0

34.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
34.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
34.04 Interpret and explain written organizational policies and procedures. ELR 2.0
30.05 Identify and exhibit traits for retaining employment

35.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
35.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
35.02 Describe the effect of money management on personal and career goals. FL 3.0
35.03 Develop a personal budget and financial goals. FL3.1
35.04 Complete financial instruments for making deposits and withdrawals. FL3.2
35.05 Maintain financial records. FL3.3
35.06 Read and reconcile financial statements. FL3.4
35.07 Research, compare and contrast investment opportunities.

36.0 Identify and describe the different specialties related to Fashion Design Services: Window Display, Fashion Design Assistant, Tailor's Assistant, Personal Shopper, Stylist – The student will be able to:
36.01 Identify future trends in Fashion Design Services.
36.02 Research, identify, and describe the different job responsibilities of a Window Displayer, Fashion Design Assistant, Tailor's Assistant, Personal Shopper, and Stylist.

37.0 Select one specialty area and complete the student performance standards for that area – The student will be able to:

Window Display
37.01 Demonstrate knowledge of the elements of design: color, line, proportion, scale, harmony, and light.
37.02 Demonstrate an understanding of fashion as an ethno-cultural expression.
37.03 Demonstrate space planning in a window display according to a given criteria.
37.04 Develop window displays in accordance with seasonal promotions.
37.05 Plan and create a window display project given established criteria.

Fashion Design Assistant
37.06 Demonstrate knowledge of pattern making.
37.07 Apply techniques of design draping.
37.08 Exhibit effective communication skills.
37.09 Demonstrate computer skills.
37.10 Demonstrate garment construction skills.
37.11 Explain the elements of design.
37.12 Demonstrate appropriate customer relations skills.
37.13 Plan and develop a project related to fashion design according to specifications given by designer.

Tailor's Assistant
37.14 Select suitable fabric for a tailored jacket using identified criteria.

37.15 Select suitable hair canvas, interfacing, linings, and underlining for specified fabric.
37.16 Prepare fabrics and alter patterns using pattern directions.
37.17 Lay out patterns, bias, plaid, or one-way prints using correct layout procedures.
37.18 Cut patterns, fabric, hair canvas, and linings according to given directions.
37.19 Tailor tack markings using the proper techniques.
37.20 Baste and fit a garment according to customer specifications.
37.21 Stitch seams using correct stitches for fabric.
37.22 Apply seam finishes chosen from practice samples.
37.23 Apply zippers according to manufacturer’s instructions and the application chosen for different types of garments.
37.24 Construct tailored pockets following given directions.
37.25 Construct buttonholes following given directions.
37.26 Construct chest pieces, shoulder pads, and sleeve heads following given directions.
37.27 Set in sleeves following given directions.
37.28 Construct and apply upper collar and facings following given directions.
37.29 Construct and apply linings according to fabric requirements.
37.30 Construct hems using proper techniques for fabric/garment style.
37.31 Select patterns and cut fabric for tailored pants.
37.32 Alter patterns and cut fabric for tailored pants according to customer specifications.
37.33 Fit and construct tailored pants according to customer specifications.
37.34 Construct and apply linings to tailored pants using proper techniques.
37.35 Refit and alter a ready to wear garment according to customer specifications.

Costume Design

37.36 Demonstrate taking body measurements using the correct measuring method.
37.37 Compare and alter basic patterns according to given instructions.
37.38 Construct a basic muslin shell using customer’s measurements and/or pattern.
37.39 Transfer fitting changes to paper patterns following given directions.
37.40 Construct an oak tag board sloper from muslin following given demonstration.
37.41 Draft a pattern according to costume specifications.
37.42 Identify and describe styles that suit body types.
37.43 Identify and design garments to suit body types.
37.44 Choose fabric for body type and design based on customer criteria.
37.45 Design garments for dance, theater, sports activities, costumes, music videos, and print ads.
37.46 Define draping and demonstrate the draping method of design.

Personal Shopper

37.47 Demonstrate effective communication skills.
37.48 Identify different body types.
37.49 Identify and demonstrate knowledge of appropriate attire for various ages, body types, and occasions.
37.50 Demonstrate an understanding of the relationship between color and skin tones.
37.51 Demonstrate the ability to work within a customer’s budget.
37.52 Coordinate wardrobe essentials.
37.53 Plan and develop a personal shopping project according to clients’ established criteria.
37.54 Exhibit skills necessary for a quality presentation of selections to clients.

37.55 Identify future trends in personal shopping.

Stylist

37.56 Demonstrate effective communication skills.
37.57 Identify different body types.
37.58 Identify and demonstrate knowledge of appropriate attire for various ages, body types, and occasions.
37.59 Demonstrate an understanding of the relationship between color and skin tones.
37.60 Demonstrate the ability to work within a customer's budget.
37.61 Identify future trends and future techniques in styling sets.
37.62 Identify and select fashion and accessories based on specific criteria.
37.63 Explain how the media has helped to define fashion and influence design trends.
37.64 Coordinate wardrobe essentials.
37.65 Plan and develop a stylist project based on established criteria.

38.0 (Optional) Schedule and participate in Fashion Design Services job shadowing – The student will be able to:

38.01 Research persons working in the Fashion Design Services profession within the local area.
38.02 Formalize in writing, a job shadowing experience, applying knowledge gained within the program and using the guidelines set by the district, instructor and employer and using knowledge synthesized within the program.

39.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

39.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
39.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
39.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
39.04 Employ mentoring skills to inspire and teach others. LT 5.0

40.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

40.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
40.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
40.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
40.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0

41.0 Finalize a fashion portfolio per industry standards– The student will be able to

41.01 Submit a portfolio including all work from the Fashion Technology and Design Services program.
41.02 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
41.03 Construct basic hand techniques
41.04 Stay stitching and ease stitching
41.05 Straight seams, clean finish and various seam finishes
41.06 Hemming techniques

42.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

42.01 Describe the nature and types of business organizations. SY 1.0
42.02 Explain the effect of key organizational systems on performance and quality.

42.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0

42.04 Explain the impact of the global economy on business organizations. HE 2.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Design Services Core**
Course Number: **8506405**
Course Credit: **1**

Course Description:

This course is the core course of the fashion design services program. It is designed to develop competencies in the areas of the fashion design industry. It includes essential basic skills for working in design services, leadership and organizational skills, basic principles of design, textile characteristics and care, employability skills, relationship of human factors to design services, safe use of tools and equipment, and selection of appropriate materials.

01.0 Demonstrate leadership and organizational skills – The student will be able to:
- 01.01 Identify professional and youth organizations.
- 01.02 Identify purposes and functions of professional and youth organizations.
- 01.03 Identify roles and responsibilities of members
- 01.04 Demonstrate cooperation as a group member in achieving organizational goals.
- 01.05 Demonstrate confidence in leadership roles and organizational responsibilities.

02.0 Demonstrate appropriate basic skills essential to working in occupations in design services – The student will be able to:
- 02.01 Identify the communication knowledge, skills, and attitudes necessary to perform the occupational tasks.
- 02.02 Demonstrate communication competencies necessary to perform the occupational tasks.

03.0 Identify and exhibit employment skills – The student will be able to:
- 03.01 Conduct a job search using the internet, media center, phone, or a computerized model.
- 03.02 Identify occupations in the garment/textile industry and the duties and responsibilities of those occupations.
- 03.03 Identify occupations in Fashion Design Services.
- 03.04 Identify personal skills and interests that may lead to a career exploration related to Fashion Design Services.
- 03.05 Identify levels of training required for occupations in Fashion Design Services.
- 03.06 Identify duties and responsibilities for occupations in Fashion Design Services.
- 03.07 Identify ways to achieve job advancement in Fashion Design Services occupations.

04.0 Describe the relationship of human factors to design services – The student will be able to:
- 04.01 Define the elements of design that are applicable to fashion and/or interior design (space, line, shape, form, texture, color).
- 04.02 Define the principles of design that are applicable to fashion and/or interior design (proportion, scale, balance, emphasis, rhythm, harmony).
- 04.03 Explain the impact of human factors (psychological, physiological, and social needs) on decisions relating to the design services process.

04.04 Identify and describe modifications necessary to accommodate individuals with special needs.
04.05 Identify and describe various garment styles, features, and parts as they related to the elements and principles of design.

05.0 Identify textile characteristics and care – After teacher demonstration, textbook/multi-media research or following sample instruction the student will be able to:
05.01 Identify and describe fiber characteristics.
05.02 Identify and describe types of fabric construction.
05.03 Identify and describe types of fabric finishes.
05.04 Identify and describe types of textiles.
05.05 Identify laws and regulations governing the textile industry including labeling laws.

06.0 Select and use tools and equipment safely – After teacher demonstration or textbook/multi-media research the student will be able to:
06.01 Identify the tools and equipment used in design services.
06.02 Select the appropriate tools and equipment for assigned projects.
06.03 Demonstrate the proper and safe use of tools and equipment, such as, but not limited to shears, rotary cutter, measuring tools, etc.
06.04 Identify and demonstrate safety procedures in using conventional sewing machines and home sergers.
06.05 Identify and demonstrate safety procedures in using pressing equipment.
06.06 Explain the importance of observing Occupational Safety and Health Administration (OSHA) rules and regulations.

07.0 Operate and maintain a conventional and commercial/industrial sewing machine (may need to remove since according to Lisa under 18 year olds should not be using these machines.) – After teacher demonstration, textbook/multi-media research or following manufacturer's instructions, the student will be able to:
07.01 Identify the parts of the sewing machine.
07.02 Identify the process and demonstrate needle insertion, selecting the needle that is appropriate for various fabrics.
07.03 Identify the steps and demonstrate threading the sewing machine.
07.04 Diagram and demonstrate bobbin winding, threading the bobbin case, and inserting the bobbin correctly into the sewing machine.
07.05 Demonstrate straight stitching.
07.06 Identify and demonstrate stitch length and width selection.
07.07 Demonstrate utility and decorative stitches.
07.08 Identify the tension and demonstrate tension adjustment.
07.09 Demonstrate cleaning and lubricating the machine following manufacturer's instructions.

08.0 Select and prepare materials– The student will be able to:
08.01 Identify and match pattern pieces.
08.02 Read and interpret instructions and specifications.
08.03 Identify fabric content.
08.04 Prepare fabric.
08.05 Adjust patterns following pattern directions.
08.06 Lay out, pin, cut, and mark fabric according to pattern directions.
08.07 Demonstrate stay stitching and ease stitching.

08.08 Lay out fabrics according to pattern/teacher instructions.
08.09 Match grain lines and patterns according to pattern/teacher instructions.
08.10 Mark fabric for assembly according to pattern/teacher instructions.
08.11 Mark fabric for trims according to pattern/teacher instructions.
08.12 Match thread with fabric synthesizing visual arts knowledge.
08.13 Identify, select, and use content label(s) according to fabric requirements.

09.0 Construct a simple garment – The student will be able to:
09.01 Construct a garment/garments that includes a seaming, waistband, darts, interfacing, seam finishing, hem, closure and pocket. Include garment (or photo) in portfolio.
09.02 Line up notches, dots, or clips according to pattern/teacher instructions.
09.03 Stitch on woven, stretch, or specialty fabrics using appropriate stitch length for fabrics.
09.04 Demonstrate correct pressing techniques following fabric requirements.
09.05 Demonstrate machine hemming following machine manual instructions.

10.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
10.01 Demonstrate knowledge of arithmetic operations. AF3.2
10.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
10.03 Construct charts/tables/graphs using functions and data.
10.04 Take accurate measurements to determine correct size of garments or home furnishings items. F3.5

11.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
11.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
11.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

12.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
12.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
12.02 Locate, organize and reference written information from various sources. CM 3.0
12.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
12.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
12.05 Apply active listening skills to obtain and clarify information. CM 7.0
12.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0

13.0 Develop a Fashion Portfolio– The student will be able to
13.01 Assemble a portfolio including all samples:
13.02 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
13.03 Construct basic hand techniques
13.04 Stay stitching and ease stitching
13.05 Straight seams, clean finish and various seam finishes
13.06 Hemming techniques

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Principles of Fashion Design Services**
Course Number: **8506410**
Course Credit: **1**

Course Description:

This course is the second course of the Fashion Design Services program. It is designed to further develop competencies in the area of Fashion Design Services. It includes employment opportunities in fashion design services, basic skills essential to working in this industry, employability skills, elements and principles of design, the terminology of the apparel industry, garment construction skills, sales techniques, and entrepreneurship.

14.0 Develop a Fashion Portfolio– The student will be able to
- 14.01 Maintain a career portfolio to document knowledge, skills, and experience.

15.0 Identify employment opportunities in Fashion Design Services – The student will be able to:
- 15.01 Secure information about a job and advanced training opportunities for the job and report in a written or oral format.
- 15.02 Demonstrate computer proficiency through creating, revising, retrieving and verifying information.
- 15.03 Apply the principles of time management, work simplification, and teamwork when performing assigned tasks.
- 15.04 Demonstrate pride in the quality of work performed.
- 15.05 Identify career options in Fashion Design Services such as entrepreneurship.
- 15.06 Create a presentation on non-traditional career paths (costume design, theater, entertainment, buyers, fabric store owners etc.) in the garment/textile industry.
- 15.07 Analyze current trends as they may affect the future of occupations in Fashion Design Services.
- 15.08 Identify different earning and wage level options for occupations in Fashion Design Services.

16.0 Demonstrate appropriate basic skills essential to working in occupations in Fashion Design Services – The student will be able to:
- 16.01 Identify the mathematics knowledge, skills, and attitudes necessary to perform the occupational tasks.
- 16.02 Identify the scientific knowledge, skills, and attitudes necessary to perform the occupational tasks.
- 16.03 Demonstrate math competencies necessary to perform the occupational tasks.
- 16.04 Demonstrate scientific competencies necessary to perform the occupational tasks.
- 16.05 Distinguish between specifics of individual vs. mass production design needs.

17.0 Identify and exhibit employment skills for occupations related to Fashion Design Services – The student will be able to:
- 17.01 Identify and list documents that may be required when applying for a job.
- 17.02 Complete a job application form accurately.

17.03 Demonstrate competence in job interview techniques using role playing techniques.
17.04 Identify and demonstrate appropriate responses to criticism from an employer, supervisor, or co-worker.
17.05 Identify and demonstrate acceptable work habits including a positive attitude.
17.06 Demonstrate knowledge of how to make job changes appropriately.
17.07 Identify and describe acceptable employee health and hygiene habits.
17.08 Demonstrate customer relations skills synthesizing given instructions.
17.09 Develop and create a resume’ and portfolio following a given format.

18.0 Demonstrate an understanding of the elements and principles of design – After teacher demonstration, textbook/multimedia research or professional presentation, the student will be able to:
18.01 Identify and explain the elements of design and how various effects can be achieved in relation to Fashion Design Services through written/oral reporting or demonstrations: texture, pattern, line, form and shape, space, color, and light
18.02 Identify and explain the principles of design and how they can be used effectively in Fashion Design Services using a variety of research and reporting methods: proportion, scale, balance, rhythm, emphasis, and harmony.
18.03 Apply the elements and principles of design to Fashion Design Services.
18.04 Develop a project applying color and color schemes in a design.
18.05 Evaluate good design by using the laws of design.
18.06 Create Elements and Principles of Design Portfolio

19.0 Demonstrate an understanding of the terminology used in the apparel industry – The student will be able to:
19.01 Complete a research project dealing with aspects of fashion retail and production including terminology, labels, designers, manufacturers and stores used within the apparel industry.
20.0 Operate specialty machines (if available) – After a teacher demonstration the student will be able to identify and operate at least four of the following machines:
20.01 Electronic programmable machines.
20.02 Serger
20.03 Straight stitch machine
20.04 Zigzag machine
20.05 Embroidery machine

21.0 Demonstrate skill in construction of simple garments – The student will be able to:
21.01 Identify common ready to wear sizes.
21.02 Identify and describe characteristics of a properly fitted garment.
21.03 Take accurate body measurements, select pattern size, and determine figure type.
21.04 Interpret verbal, written, and visual directions.
21.05 Prepare fabric and adjust patterns following pattern directions.
21.06 Lay out, pin, cut, and mark fabric according to pattern specifications.
21.07 Demonstrate stay stitching and ease stitching.
21.08 Demonstrate stitching darts and tucks.
21.09 Identify and match garment pieces using markings and stitching following directions.
21.10 Match plaids, stripes and one-way designs following specified instructions.
21.11 Demonstrate correct pressing techniques following fabric requirements.

21.12 Demonstrate casing and elastic installation.
21.13 Demonstrate machine hemming following machine manual instructions.
21.14 Identify types of sergers and their characteristics

22.0 Demonstrate an understanding of the importance of how eco fashion decisions impact the environment, consumer health and the working conditions of people in the fashion industry.
22.01 Demonstrate an understanding of eco fashion
22.02 Identify materials that can be used to make eco friendly fashions and accessories and why these materials are eco friendly
22.03 Compare the working conditions of employees in the workplace when materials are produced following eco friendly guidelines and when they are not.
22.04 Research methods for using vegetable and plant materials for eco friendly fashions and replacing these materials back into the environment.
22.05 Describe ways to be eco friendly and the environmental and social responsibility of eco friendly methods.
22.06 Design and create an eco friendly fashion product

23.0 Demonstrate an understanding of entrepreneurship – The student will be able to:
23.01 Define entrepreneurship.
23.02 Debate the advantages and disadvantages of business ownership through a written or oral presentation.
23.03 Identify and describe, orally or in writing, the characteristics and responsibilities of an entrepreneur.
23.04 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

24.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
24.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
24.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
24.03 Present information formally and informally for specific purposes and audiences. AF2.9

25.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
25.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
25.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
25.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
25.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

26.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
26.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
26.02 Explain emergency procedures to follow in response to workplace accidents.
26.03 Create a disaster and/or emergency response plan. SHE 2.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Pattern Design Techniques**
Course Number: **8506420**
Course Credit: **1**

Course Description:

This course is the third course in the Fashion Design Services program. It is designed to further develop competencies in the area of fashion design services. It includes researching history and culture's effect on design, sketching and free hand drawing, use of technology in the fashion industry, clothing needs for special populations, and creation of an original pattern.

14.0 Develop a Fashion Portfolio– The student will be able to
  14.01 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0

26.0 Research how fashion design is affected by history and culture – The Student will be able to:
  26.01 Identify design periods from 1900 to the present day.
  26.02 Explain the influence of earlier design periods on present day design.
  26.03 Describe the elements and principles of design as they relate to a particular time period/culture.
  26.04 Create a multi-media presentation detailing a selected design period.

27.0 Demonstrate sketching and free hand drawing skills – The student will be able to:
  27.01 Demonstrate sketching and shading techniques.
  27.02 Create inspiration boards to display the sketches and drawings.
  27.03 Select and develop a design collection according to determined criteria using sketching and shading techniques to be used in portfolio.

28.0 Demonstrate an understanding of how technology is used in the fashion industry – The student will be able to:
  28.01 Research and list software available in the area of fashion design.
  28.02 Demonstrate an understanding of how current technologies (CAD, electronic sewing, knitting, embroidery machines, sergers) are used in the creation of fashion products (e.g. fashion profiles, fabrics, garments).
  28.03 Analyze how certain technologies are used in the fashion design industry.
  28.04 Create a fashion product using two or more technologies appropriately.
  28.05 Research innovations in materials and technologies that have contributed to safeguards in the tools and equipment used in design services.
  28.06 Identify the development of tools, equipment and technology used in design services as they relate to particular historical periods.

29.0 Identify the psychological and practical needs for clothing for special markets – The student will be able to:
  29.01 List human and environmental factors that could impact a design (e.g. uniforms, clothing in non-standard sizes, clothing for people with disabilities, maternity wear, clothing for children and the elderly, protective clothing for dangerous

conditions and climatic extremes, purpose-designed clothing for sports, leisure, and entertainment industries).
29.02 Plan and implement a fashion design project based on a specific human or environmental factor.

30.0 Create an original pattern for a garment – The student will be able to:
30.01 Plan and report on a fashion design project using established criteria.
30.02 Using appropriate software, insert body measurements to produce a pattern.
30.03 Create a muslin prototype of the pattern.
30.04 Evaluate the prototype for proper fit and adjust as needed.
30.05 Construct a specialty garment(s) according to teacher instructions - project must include a minimum number of construction skills as designated by teacher.

31.0 Demonstrate alteration skills on a sample or garment – The student will be able to:
31.01 Remove stitches in ready-made garments without damaging fabric.
31.02 Mark and even a hemline following guidelines.
31.03 Lengthen and shorten hems in pants, skirts, or dresses (include cuffs and use of hem tape)
31.04 Remove the flare from pant legs following a given set of directions.
31.05 Taper a skirt following a given set of directions.
31.06 Shorten the crotch rise in a garment/sample.
31.07 Take in the waist on a man’s garment/sample.
31.08 Take in the waist on a woman’s garment/sample.
31.09 Take in the side seams on a blouse/shirt.
31.10 Shorten sleeves at the cuff on a garment/sample.
31.11 Shorten sleeves at the shoulder cap on a garment/sample.
31.12 Finish seams and press altered areas using ~~acquired~~ pressing techniques.

32.0 Demonstrate clothing repair on a garment or sample – the student will be able to:
32.01 Reinforce seams and buttonholes on a garment/sample.
32.02 Replace zippers in various types of garments/samples (including fly/jeans).
32.03 Apply patches on a garment/sample.
32.04 Replace various types of buttons on a garment/sample.
32.05 Demonstrate appropriate pressing techniques on repaired garments/samples.

33.0 Use information technology tools--The students will be able to:
33.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
33.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
33.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
33.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

34.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
34.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
34.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1

34.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
34.04 Interpret and explain written organizational policies and procedures. ELR 2.0
34.05 Identify and exhibit traits for retaining employment.

35.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

35.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
35.02 Describe the effect of money management on personal and career goals. FL 3.0
35.03 Develop a personal budget and financial goals. FL3.1
35.04 Complete financial instruments for making deposits and withdrawals. FL3.2
35.05 Maintain financial records. FL3.3
35.06 Read and reconcile financial statements. FL3.4
35.07 Research, compare and contrast investment opportunities

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Fashion Design Specialist**
Course Number:	**8506430**
Course Credit:	**1**

Course Description:

This course is the fourth course in the Fashion Design Services program. It is designed to further develop competencies in the area of Fashion Design Services. This course focuses on five specialty areas of Fashion Design Services: Window Display, Fashion Design Assistant, Tailor's Assistant, Personal Shopper, and Stylist. Students will select one of those specialty areas and will be expected to follow the performance standards for that area. Also included is an opportunity for job shadowing and students will be expected to finalize and submit a portfolio.

34.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 34.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 34.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 34.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 34.04 Interpret and explain written organizational policies and procedures. ELR 2.0
- 34.05 30.05 Identify and exhibit traits for retaining employment

35.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
- 35.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 35.02 Describe the effect of money management on personal and career goals. FL 3.0
- 35.03 Develop a personal budget and financial goals. FL3.1
- 35.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 35.05 Maintain financial records. FL3.3
- 35.06 Read and reconcile financial statements. FL3.4
- 35.07 Research, compare and contrast investment opportunities.

36.0 Identify and describe the different specialties related to Fashion Design Services: Window Display, Fashion Design Assistant, Tailor's Assistant, Personal Shopper, Stylist – The student will be able to:
- 36.01 Identify future trends in Fashion Design Services.
- 36.02 Research, identify, and describe the different job responsibilities of a Window Displayer, Fashion Design Assistant, Tailor's Assistant, Personal Shopper, and Stylist.

37.0 Select one specialty area and complete the student performance standards for that area – The student will be able to:

Window Display

37.01 Demonstrate knowledge of the elements of design: color, line, proportion, scale, harmony, and light.
37.02 Demonstrate an understanding of fashion as an ethno-cultural expression.
37.03 Demonstrate space planning in a window display according to a given criteria.
37.04 Develop window displays in accordance with seasonal promotions.
37.05 Plan and create a window display project given established criteria.

Fashion Design Assistant

37.06 Demonstrate knowledge of pattern making.
37.07 Apply techniques of design draping.
37.08 Exhibit effective communication skills.
37.09 Demonstrate computer skills.
37.10 Demonstrate garment construction skills.
37.11 Explain the elements of design.
37.12 Demonstrate appropriate customer relations skills.
37.13 Plan and develop a project related to fashion design according to specifications given by designer.

Tailor's Assistant

37.14 Select suitable fabric for a tailored jacket using identified criteria.
37.15 Select suitable hair canvas, interfacing, linings, and underlining for specified fabric.
37.16 Prepare fabrics and alter patterns using pattern directions.
37.17 Lay out patterns, bias, plaid, or one-way prints using correct layout procedures.
37.18 Cut patterns, fabric, hair canvas, and linings according to given directions.
37.19 Tailor tack markings using the proper techniques.
37.20 Baste and fit a garment according to customer specifications.
37.21 Stitch seams using correct stitches for fabric.
37.22 Apply seam finishes chosen from practice samples.
37.23 Apply zippers according to manufacturer's instructions and the application chosen for different types of garments.
37.24 Construct tailored pockets following given directions.
37.25 Construct buttonholes following given directions.
37.26 Construct chest pieces, shoulder pads, and sleeve heads following given directions.
37.27 Set in sleeves following given directions.
37.28 Construct and apply upper collar and facings following given directions.
37.29 Construct and apply linings according to fabric requirements.
37.30 Construct hems using proper techniques for fabric/garment style.
37.31 Select patterns and cut fabric for tailored pants.
37.32 Alter patterns and cut fabric for tailored pants according to customer specifications.
37.33 Fit and construct tailored pants according to customer specifications.
37.34 Construct and apply linings to tailored pants using proper techniques.
37.35 Refit and alter a ready to wear garment according to customer specifications.

Costume Design

37.36 Demonstrate taking body measurements using the correct measuring method.
37.37 Compare and alter basic patterns according to given instructions.
37.38 Construct a basic muslin shell using customer's measurements and/or pattern.

37.39 Transfer fitting changes to paper patterns following given directions.
37.40 Construct an oak tag board sloper from muslin following given demonstration.
37.41 Draft a pattern according to costume specifications.
37.42 Identify and describe styles that suit body types.
37.43 Identify and design garments to suit body types.
37.44 Choose fabric for body type and design based on customer criteria.
37.45 Design garments for dance, theater, sports activities, costumes, music videos, and print ads.
37.46 Define draping and demonstrate the draping method of design.

Personal Shopper

37.47 Demonstrate effective communication skills.
37.48 Identify different body types.
37.49 Identify and demonstrate knowledge of appropriate attire for various ages, body types, and occasions.
37.50 Demonstrate an understanding of the relationship between color and skin tones.
37.51 Demonstrate the ability to work within a customer's budget.
37.52 Coordinate wardrobe essentials.
37.53 Plan and develop a personal shopping project according to clients' established criteria.
37.54 Exhibit skills necessary for a quality presentation of selections to clients.
37.55 Identify future trends in personal shopping.

Stylist

37.56 Demonstrate effective communication skills.
37.57 Identify different body types.
37.58 Identify and demonstrate knowledge of appropriate attire for various ages, body types, and occasions.
37.59 Demonstrate an understanding of the relationship between color and skin tones.
37.60 Demonstrate the ability to work within a customer's budget.
37.61 Identify future trends and future techniques in styling sets.
37.62 Identify and select fashion and accessories based on specific criteria.
37.63 Explain how the media has helped to define fashion and influence design trends.
37.64 Coordinate wardrobe essentials.
37.65 Plan and develop a stylist project based on established criteria.

38.0 (Optional) Schedule and participate in Fashion Design Services job shadowing – The student will be able to:

38.01 Research persons working in the Fashion Design Services profession within the local area.
38.02 Formalize in writing, a job shadowing experience, applying knowledge gained within the program and using the guidelines set by the district, instructor and employer and using knowledge synthesized within the program.

39.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

39.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
39.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
39.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
39.04 Employ mentoring skills to inspire and teach others. LT 5.0

40.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
  40.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
  40.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
  40.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
  40.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0

41.0 Finalize a fashion portfolio per industry standards– The student will be able to
  41.01 Submit a portfolio including all work from the Fashion Technology and Design Services program.
  41.02 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
  41.03 Construct basic hand techniques
  41.04 Stay stitching and ease stitching
  41.05 Straight seams, clean finish and various seam finishes
  41.06 Hemming techniques

42.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
  42.01 Describe the nature and types of business organizations. SY 1.0
  42.02 Explain the effect of key organizational systems on performance and quality.
  42.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
  42.04 Explain the impact of the global economy on business organizations. HE 2.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Interior Design Services**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8506500	V200500
CIP Number	0404050104	0404050104
Grade Level	9-12, 30, 31	30, 31
Standard Length	4 Credits	600 Hours
Teacher Certification	VOC HME EC @2 @4 I ART-TEC WT G HME EC OCC ¢7 HOMEMAKING @2 ¢7 HOME EC @2 FAM CON SC 1 GEN HME EC @2 TAILORING ¢7 I ART-TEC ¢7 APPRL MFG ¢7 @7 G INT DES 7G TEC ED 1@2	VOC HME EC @2 @4 GEN HME EC @2 HME EC OCC ¢7 @7 G HOMEMAKING ¢7 ¢2 @7G HOME EC @2 FAM CON SC 1 TAILORING ¢7 @7 G APPRL MFG ¢7 @7 G I ART-TEC ¢7 I ART-TEC WT G INT DES 7G TEC ED 1@2
CTSO	FCCLA	FCCLA
SOC Codes (all applicable)	27.1025 41-2031	27.1025 41-2031
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The Interior Design Services program is designed to prepare students for initial employment or continued study in the Interior Design/Decorating industry. This program focuses on broad transferable skills and stresses the understanding and demonstration of the following aspects of the residential design and decoration industry: planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

NOTE: The core course in this program should emphasize and include activities related to Interior Design.

The recommended sequence allows students to complete specified portions of the program for employment or to remain for advanced training. A student who completes the applicable competencies at each occupational completion point may either continue the training program or terminate as an occupational completer. This program may be offered at both secondary and post-secondary adult vocational (PSAV) levels.

Program Structure

This program is a planned sequence of instruction consisting of four courses including core, four Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	HEV0010	Retail Sales	150 Hours	41-2031
B	HEV0410	Interior Design Assistant	150 Hours	27-1025
C	HEV0416	Drafter	150 Hours	27-1025
D	HEV0414	Interior Design Specialist	150 Hours	27-1025

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8506405	Design Services Core	1 Credit	41-2031	2
B	8506540	Principles of Interior Design Services	1 Credit	27-1025	2
C	8506550	Interior Design Techniques	1 Credit	27-1025	2
D	8506560	Interior Design Specialist	1 Credit	27-1025	3

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate appropriate basic skills essential to working in occupations in interior design services.
02.0 Identify and exhibit employment skills.
03.0 Describe the relationship of human factors to design services.
04.0 Identify textile characteristics and care.
05.0 Select and use tools and equipment safely.
06.0 Operate and maintain a conventional and commercial/industrial sewing machine.
07.0 Operate specialty machines (minimum of four machines if available)
08.0 Select and prepare materials.
09.0 Identify employment opportunities in Interior Design Services.
10.0 Identify and exhibit employment skills for occupations related to interior design services.
11.0 Demonstrate an understanding of the elements and principles of design.
12.0 Demonstrate sales techniques in Interior Design Services.
13.0 Demonstrate an understanding of entrepreneurship.
14.0 Identify and describe components of the design process.
15.0 Research how design is affected by history and culture.
16.0 Demonstrate sketching and free hand drawing skills.
17.0 Demonstrate the ability to use interior design services software.
18.0 Explain how human, environmental, and ergonomic factors impact design solutions.
19.0 Demonstrate knowledge of rendering techniques for presentations.
20.0 Plan and develop a design project
21.0 Identify and describe the different specialties related to interior design services.
22.0 Plan and develop a complete design project in a specialty selected to meet client's requirements and criteria.
23.0 (Optional) Schedule and participate in Interior Design Services job shadowing.
24.0 Finalize a portfolio per industry standards.
25.0 Demonstrate mathematics knowledge and skills.

26.0 Demonstrate science knowledge and skills
27.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
28.0 Demonstrate language arts knowledge and skills
29.0 Solve problems using critical thinking skills, creativity and innovation.
30.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance
31.0 Use information technology tools
32.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
33.0 Demonstrate personal money-management concepts, procedures, and strategies
34.0 . Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
35.0 Describe the importance of professional ethics and legal responsibilities.
36.0 Explain the importance of employability and entrepreneurship skills

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Interior Design Services
PSAV Number: V200500

Course Number: HEV0010
Occupational Completion Point: A
Core Retail Sales Person –150 Hours – SOC Code 41-2031

01.0 Demonstrate leadership and organizational skills – the student will be able to:
- 01.01 Identify professional and youth organizations.
- 01.02 Identify purposes and functions of professional and youth organizations.
- 01.03 Identify roles and responsibilities of members
- 01.04 Demonstrate cooperation as a group member in achieving organizational goals.
- 01.05 Demonstrate confidence in leadership roles and organizational responsibilities.

02.0 Demonstrate appropriate basic skills essential to working in occupations in design services – the student will be able to:
- 02.01 Identify the communication knowledge, skills, and attitudes necessary to perform the occupational tasks.
- 02.02 Demonstrate communication competencies necessary to perform the occupational tasks.

03.0 Identify and exhibit employment skills – the student will be able to:
- 03.01 Conduct a job search using the internet, media center, phone, or a computerized model.
- 03.02 Secure information about a job and advanced training opportunities for the job and report in a written or oral format.
- 03.03 Demonstrate computer proficiency through creating, revising, retrieving and verifying information.
- 03.04 Apply the principles of time management, work simplification, and teamwork when performing assigned tasks.
- 03.05 Demonstrate pride in the quality of work performed.

04.0 Describe the relationship of human factors to design services – the student will be able to:
- 04.01 Define the elements of design that are applicable to fashion and/or interior design (space, line, shape, form, texture, color).
- 04.02 Define the principles of design that applicable to fashion and/or interior design (proportion, scale, balance, emphasis, rhythm, harmony).
- 04.03 Explain the impact of human factors (psychological, physiological, and social needs) on decisions relating to the design services process.
- 04.04 Identify and describe modifications necessary to accommodate individuals with special needs.
- 04.05 Identify and describe the impact of human needs and wants on the cost of design services and customized garments.
- 04.06 Identify and describe the importance of barrier-free design and accessibility related to design services.

04.07 Identify and describe characteristics of properly fitted garments/interior spaces and furnishings.
04.08 Take accurate measurements to determine correct size of garments or home furnishings items.

05.0 Identify textile characteristics and care – after teacher demonstration, textbook/multi-media research or following sample instruction, the student will be able to:
05.01 Identify and describe fiber characteristics.
05.02 Identify and describe types of fabric construction.
05.03 Identify and describe types of fabric finishes.
05.04 Identify and describe types of textiles.
05.05 Identify laws and regulations governing the textile industry including labeling laws.

06.0 Select and use tools and equipment safely – After teacher demonstration or textbook/multi-media research the student will be able to:
06.01 Identify the tools and equipment used in design services.
06.02 Select the appropriate tools and equipment for assigned projects.
06.03 Demonstrate the proper and safe use of tools and equipment.
06.04 Identify and demonstrate safety procedures in using conventional sewing machines and home sergers.
06.05 Identify and demonstrate safety procedures in using pressing equipment.
06.06 Clean and maintain various types of tools and equipment.
06.07 Keep an inventory record of tools, equipment, supplies, and materials using computer application software.
06.08 Explain the importance of observing Occupational Safety and Health Administration (OSHA) rules and regulations.
06.09 Research innovations in materials and technologies that have contributed to safeguards in the tools and equipment used in design services.
06.10 Identify the development of tools, equipment and technology used in design services as they relate to particular historical periods.
06.11 Identify and apply drafting tools and techniques to a specific design services project

07.0 Operate and maintain a conventional and commercial/industrial sewing machine – After teacher demonstration, textbook/multi-media research or following manufacturer's instructions, the student will be able to:
07.01 Identify the process and demonstrate needle insertion, selecting the needle that is appropriate for various fabrics.
07.02 Identify the steps and demonstrate threading the sewing machine.
07.03 Diagram and demonstrate bobbin winding, threading the bobbin case, and inserting the bobbin correctly into the sewing machine.
07.04 Demonstrate straight stitching.
07.05 Identify and demonstrate stitch length and width selection.
07.06 Demonstrate utility and decorative stitches.
07.07 Identify the tension and demonstrate tension adjustment.
07.08 Demonstrate cleaning and lubricating the machine following manufacturer's instructions.
07.09 Demonstrate sewing machine light bulb replacement.

08.0 Operate specialty machines (minimum of four machines if available) – After a teacher demonstration the student will be able to identify and operate at least four of the following machines:

a. Electronic programmable machines.
b. Serger
c. Pleater
d. Blindstitch machine
e. Straight stitch machine
f. Chain stitch machine
g. Cutting machine
h. Bar tack
i. Zigzag machine

09.0 Select and prepare materials – The student will be able to:

09.01 Identify and match pattern pieces.
09.02 Read and interpret instructions and specifications.
09.03 Identify fabric content.
09.04 Lay out fabrics according to pattern/teacher instructions.
09.05 Match grain lines and patterns according to pattern/teacher instructions.
09.06 Match plaids, stripes and one-way designs following specified instructions.
09.07 Mark and cut using special tables and cutting equipment.
09.08 Line up notches, dots, or clips according to pattern/teacher instructions.
09.09 Mark fabric for assembly according to pattern/teacher instructions.
09.10 Mark fabric for trims according to pattern/teacher instructions.
09.11 Match thread with fabric synthesizing visual arts knowledge.
09.12 Stitch on woven, stretch, or specialty fabrics using appropriate stitch length for fabrics.
09.13 Identify, select, and use content label(s) according to fabric requirements.

25.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0

25.01 Demonstrate knowledge of arithmetic operations. AF3.2
25.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
25.03 Construct charts/tables/graphs using functions and data. AF3.5

26.0 Demonstrate science knowledge and skills. **--** The students will be able to: AF4.0

26.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
26.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

27.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:

27.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
27.02 Locate, organize and reference written information from various sources. CM 3.0
27.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
27.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
27.05 Apply active listening skills to obtain and clarify information. CM 7.0

27.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
27.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

Course Number: HEV0410
Occupational Completion Point: B
Interior Design Assistant –150 Hours – SOC Code 27-1025

02.0 Demonstrate appropriate basic skills essential to working in occupations in Interior Design Services – The student will be able to:
02.01 Identify the mathematics knowledge, skills, and attitudes necessary to perform the occupational tasks.
02.02 Identify the scientific knowledge, skills, and attitudes necessary to perform the occupational tasks.
02.03 Demonstrate math competencies necessary to perform the occupational tasks.
02.04 Demonstrate scientific competencies necessary to perform the occupational tasks.
02.05 Distinguish between specifics of individual vs. mass production design needs.

10.0 Identify employment opportunities in Interior Design Services – The student will be able to:
10.01 Identify occupations in Interior Design Services.
10.02 Identify personal skills and interests that may lead to a career exploration related to Interior Design Services.
10.03 Identify levels of training required for occupations in Interior Design Services.
10.04 Identify duties and responsibilities for occupations in Interior Design Services.
10.05 Identify ways to achieve job advancement in Interior Design Services occupations.
10.06 Identify career options in Interior Design Services such as entrepreneurship.
10.07 Analyze current trends as they may affect the future of occupations in Interior Design Services.
10.08 Identify different earning and wage level options for occupations in Interior Design Services.

11.0 Identify and exhibit employment skills for occupations related to Interior Design Services – The student will be able to:
11.01 Identify and list documents that may be required when applying for a job.
11.02 Complete a job application form accurately.
11.03 Demonstrate competence in job interview techniques using role- playing techniques.
11.04 Identify and demonstrate appropriate responses to criticism from an employer, supervisor, or co-worker.
11.05 Identify and demonstrate acceptable work habits including a positive attitude.
11.06 Demonstrate knowledge of how to make job changes appropriately.
11.07 Identify and describe acceptable employee health and hygiene habits.
11.08 Demonstrate customer relations skills synthesizing given instructions.
11.09 Develop and create a resume' and portfolio following a given format.

12.0 Demonstrate an understanding of the elements and principles of design – After teacher demonstration, textbook/multimedia research or professional presentation, the student will be able to:

12.01 Identify and explain the elements of design and how various
12.02 Effects can be achieved in relation to interior design services
12.03 Through written/oral reporting or demonstrations: texture, pattern, line, form and shape, space, color, and light.
12.04 Identify and explain the principles of design and how they can be used effectively in interior design services using a variety of research and reporting methods: proportion, scale, balance, rhythm, emphasis, and harmony.
12.05 Apply the elements and principles of design to Interior Design Services.
12.06 Develop a plan applying color and color schemes in a design.
12.07 Evaluate good design by using the laws of design.

13.0 Demonstrate sales techniques in Interior Design Services – The student will be able to:
13.01 Identify, ask, and answer questions coherently and concisely.
13.02 Read and follow written instructions and listen to and follow oral instructions.
13.03 Give sales presentations orally and in writing.
13.04 Find information on sales products and services.
13.05 Research and recommend products used in Interior Design Services that meet the customer's needs based upon customer specifications.
13.06 Demonstrate appropriate computer and telecommunication skills.
13.07 Perform sales transactions using computer skills.
13.08 Recognize the importance of a sense of responsibility and ethical behavior in the Interior Design Services industry.

14.0 Demonstrate an understanding of entrepreneurship – The student will be able to:
14.01 Define entrepreneurship.
14.02 Debate the advantages and disadvantages of business ownership through a written or oral presentation.
14.03 Identify and describe, orally or in writing, the characteristics and responsibilities of an entrepreneur.

28.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0
28.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
28.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
28.03 Present information formally and informally for specific purposes and audiences. AF2.9

29.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:
29.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
29.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
29.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
29.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

30.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:
30.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
30.02 Explain emergency procedures to follow in response to workplace accidents.

30.03 Create a disaster and/or emergency response plan.

Course Number: HEV0416
Occupational Completion Point: C
Drafter – 150 Hours – SOC Code 27-1025

15.0 Identify and describe components of the design process -- The student will be able to:
15.01 Recognize the steps in the design process.
15.02 Given a simple problem develop a flow chart that illustrates the steps in a design process. (the steps include: determine the need, brainstorm, design the brief, research, plan, fabricate, and evaluate.
15.03 Conduct a presentation.

16.0 Research how design is affected by history and culture -- The student will be able to:
16.01 Identify design periods from 1900 to the present day.
16.02 Explain the influence of earlier design periods on present day design.
16.03 Describe the elements and principles of design as they relate to a particular time period/culture.
16.04 Create a multi-media presentation detailing the design period selected.

17.0 Demonstrate sketching and free hand drawing skills -- The student will be able to:
17.01 Demonstrate sketching and shading techniques.
17.02 Create mats or frames to display the sketches and drawings.
17.03 Select and develop a design project using sketching and shading techniques to be used in portfolio.

18.0 Demonstrate the ability to use Interior Design Services software – the student will be able to:
18.01 Research and list software available in the area of interior design.
18.02 Identify and discuss the benefits of using software in today’s work place.
18.03 Read and interpret a blueprint.
18.04 Evaluate floor plans for the purpose of interior décor and design.
18.05 Illustrate size and scale in a drawing.

19.0 Explain how human, environmental, and ergonomic factors impact design solutions -- The student will be able to:
19.01 List human factors that could impact a design.
19.02 Demonstrate knowledge of how the dimensions of the human body affect the outcome of a specific design project.
19.03 Plan and implement a design project using a specific human, environmental or ergonomic factor.
19.04 Examine the positive and negative impact that a design concept has had on the environment.

20.0 Demonstrate knowledge of rendering techniques for presentations -- The student will be able to:
20.01 Given established criteria, apply all learned rendering skills to create a high quality presentation.

21.0 Plan and develop a design project -- The student will be able to:
21.01 Plan and report on a design project, using established criteria.

21.02 Calculate the areas, sizes, circumferences, square footage, etc. of a design project.
21.03 Develop a design project using drafting techniques.

31.0 Use information technology tools. -- The students will be able to:
31.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
31.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
31.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
31.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

32.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:
32.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
32.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
32.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
32.04 Interpret and explain written organizational policies and procedures. ELR 2.0

33.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:
33.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
33.02 Describe the effect of money management on personal and career goals. FL 3.0
33.03 Develop a personal budget and financial goals. FL3.1
33.04 Complete financial instruments for making deposits and withdrawals. FL3.2
33.05 Maintain financial records. FL3.3
33.06 Read and reconcile financial statements. FL3.4
33.07 Research, compare and contrast investment opportunities.

Course Number: HEV0414
Occupational Completion Point: D
Interior Design Specialist – 150 Hours – SOC Code 27-1025

22.0 Identify and describe the different specialties related to Interior Design Services (Kitchen and bath; floor, wall and window treatments; furniture, lighting, and accessories; and audio-visual and security – The student will be able to:
22.01 Identify future trends in interior décor and design.
22.02 Research, identify and describe the different job responsibilities of a kitchen and bath planner; a floor covering/window and wall treatment consultant; a furniture, lighting and accessory specialist; and an audio visual and security system specialist.

Select one specialty area (listed below) and complete the student performance standards for that area:

Kitchen and Bath

22.03 Identify principles and elements of kitchen and bath design.
22.04 Identify space planning criteria used in kitchen and bath design.
22.05 Identify safety guidelines for materials used in kitchen and bath designs.
22.06 Analyze fixtures, equipment, appliances, carpentry, cabinets, surfaces and finished materials as well as mechanical and electrical systems used in kitchen and bath designs.
22.07 Research new trends in kitchen and bath.
22.08 Demonstrate knowledge of kitchen and bath design as they relate to the total residential floor plan.

Floor, Window, and Wall Treatments

22.09 Identify and describe the characteristics of different types of floor coverings.
22.10 List and compare durability and maintenance factors for floor covering materials.
22.11 Develop criteria for the selection of floor coverings; include considerations of color, texture, type, style, pattern, client's life style, energy conservation, and environmental safety using multiple resources.
22.12 Measure and calculate space and materials for a floor covering application based upon client criteria written in a report format.
22.13 Identify and describe characteristics of different types of wall treatments.
22.14 Compare durability and maintenance factors for wall treatment materials.
22.15 Develop criteria for the selection of wall treatments; include considerations of color, texture, type, and style, pattern, client's life style, energy conservation, and environmental safety.
22.16 Identify and describe different types and functions of windows and window treatments.
22.17 Categorize window treatments as drapery or nondrapery.
22.18 Identify and describe the characteristics of nondrapery treatments.
22.19 Identify and describe the characteristics of fabrics used for window treatments.
22.20 Describe the characteristics of draperies and their headings.
22.21 Recognize the different types and uses of appropriate hardware for window treatments.
22.22 Identify and describe in writing window treatment styles.
22.23 Compare durability and maintenance factors for window treatment materials.
22.24 Develop criteria for the selection of window treatments; include considerations of color, texture, type, style, pattern, client's life style, energy conservation, and environmental safety.
22.25 Demonstrate knowledge of floor, window, and wall treatments as they relate to the total residential floor plan.

Furniture, Lighting and Accessories

22.26 Identify and describe the historical characteristics of furniture styles.
22.27 Identify and describe the methods of furniture construction.
22.28 Compare and contrast types of wood and illustrate comparisons in an informal presentation, written report, or computerized presentation.
22.29 Describe the types of finishes and the care required for each one.
22.30 Compare and contrast man-made fibers (i.e. polyester, metal, synthetic plastic) with natural materials (i.e. cotton, wood, leather) used in furniture construction.
22.31 Identify and describe different accessories for home/office/ function or appropriate setting for an oral presentation.
22.32 Demonstrate appropriate groupings and the placement of

22.33 Identify and describe different types of lighting fixtures and light bulbs.
22.34 Select and identify appropriate lighting for specific spaces to include general, task, ambiance considering life-styles and energy conservation specifications.
22.35 Demonstrate knowledge of furniture, lighting, and accessories as they relate to the total residential floor plan.

Audio Visual and Security Systems

22.36 Identify and select materials and finishes suitable for environments requiring acoustic specifications.
22.37 Develop criteria for the selection of audio visual and security systems for specific spaces considering life style and energy conservation or as required by local ordinance or state code.
22.38 Demonstrate knowledge of audio visual and security systems as they relate to the total residential floor plan.

23.0 Plan and develop a complete design project in a specialty selected to meet client's requirements and criteria – The student will be able to:

23.01 Read and interpret a blueprint for this specific project.
23.02 Plan and write a design project for a specific client profile, applying the elements and principles of design.
23.03 Calculate areas, sizes, circumferences, square footage, etc. of the design project.
23.04 Select appropriate materials and products for the project.
23.05 Measure and calculate the materials needed for client specified project.
23.06 Estimate the number of products needed for the client project.
23.07 Determine the budgetary limitations of the client.
23.08 Estimate the cost required to implement the plan and evaluate the estimate in relation to the client's budget.
23.09 Create a presentation board and make an oral presentation to the client.

24.0 (Optional) Schedule and participate in Interior Design Services job shadowing – The student will be able to:

24.01 Research persons working in the interior design services profession within the local area.
24.02 Formalize in writing, a job shadowing experience, applying knowledge gained within the program and using the guidelines set by the district, instructor and employer and using knowledge synthesized within the program.

25.0 Finalize a portfolio per industry standards – The student will be able to:

25.01 Submit a portfolio including all work from the Interior Design Services program.

34.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:

34.01 Describe the nature and types of business organizations. SY 1.0
34.02 Explain the effect of key organizational systems on performance and quality.
34.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
34.04 Explain the impact of the global economy on business organizations. **HE 2.0**

35.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:

35.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
35.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
35.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
35.04 Employ mentoring skills to inspire and teach others. LT 5.0

36.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:

36.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
36.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
36.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
36.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
36.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
36.06 Identify and exhibit traits for retaining employment. ECD 7.0
36.07 Identify opportunities and research requirements for career advancement. ECD 8.0
36.08 Research the benefits of ongoing professional development. ECD 9.0
36.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Design Services Core**
Course Number: **8506405**
Course Credit: **1**

Course Description:

This course is the core course of the Interior Design Services program. It is designed to develop competencies in the areas of the interior design/decorating industry. It includes essential basic skills for working in design services, leadership and organizational skills, basic principles of design, textile characteristics and care, employability skills, relationship of human factors to design services, safe use of tools and equipment, and selection of appropriate materials.

01.0 Demonstrate leadership and organizational skills – The student will be able to:
  01.01 Identify professional and youth organizations.
  01.02 Identify purposes and functions of professional and youth organizations.
  01.03 Identify roles and responsibilities of members
  01.04 Demonstrate cooperation as a group member in achieving organizational goals.
  01.05 Demonstrate confidence in leadership roles and organizational responsibilities.

02.0 Demonstrate appropriate basic skills essential to working in occupations in design services – The student will be able to:
  02.01 Identify the communication knowledge, skills, and attitudes necessary to perform the occupational tasks.
  02.02 Demonstrate communication competencies necessary to perform the occupational tasks.

03.0 Identify and exhibit employment skills – The student will be able to:
  03.01 Conduct a job search using the internet, media center, phone, or a computerized model.
  03.02 Secure information about a job and advanced training opportunities for the job and report in a written or oral format.
  03.03 Demonstrate computer proficiency through creating, revising, retrieving and verifying information.
  03.04 Apply the principles of time management, work simplification, and teamwork when performing assigned tasks.
  03.05 Demonstrate pride in the quality of work performed.

04.0 Describe the relationship of human factors to design services – The student will be able to:
  04.01 Define the elements of design that are applicable to fashion and/or interior design (space, line, shape, form, texture, color).
  04.02 Define the principles of design that are applicable to fashion and/or interior design (proportion, scale, balance, emphasis, rhythm, harmony).
  04.03 Explain the impact of human factors (psychological, physiological, and social needs) on decisions relating to the design services process.

04.04 Identify and describe modifications necessary to accommodate individuals with special needs.
04.05 Identify and describe the impact of human needs and wants on the cost of design services and customized garments.
04.06 Identify and describe the importance of barrier-free design and accessibility related to design services.
04.07 Identify and describe characteristics of properly fitted garments/interior spaces and furnishings.
04.08 Take accurate measurements to determine correct size of garments or home furnishings items.

05.0 Identify textile characteristics and care – After teacher demonstration, textbook/multi-media research or following sample instruction, the student will be able to:
05.01 Identify and describe fiber characteristics.
05.02 Identify and describe types of fabric construction.
05.03 Identify and describe types of fabric finishes.
05.04 Identify and describe types of textiles.
05.05 Identify laws and regulations governing the textile industry including labeling laws.

06.0 Select and use tools and equipment safely – After teacher demonstration or textbook/multi-media research the student will be able to:
06.01 Identify the tools and equipment used in design services.
06.02 Select the appropriate tools and equipment for assigned projects.
06.03 Demonstrate the proper and safe use of tools and equipment.
06.04 Identify and demonstrate safety procedures in using conventional sewing machines and home sergers.
06.05 Identify and demonstrate safety procedures in using pressing equipment.
06.06 Clean and maintain various types of tools and equipment.
06.07 Keep an inventory record of tools, equipment, supplies, and materials using computer application software.
06.08 Explain the importance of observing occupational safety and health administration (OSHA) rules and regulations.
06.09 Research innovations in materials and technologies that have contributed to safeguards in the tools and equipment used in design services.
06.10 Identify the development of tools, equipment and technology used in design services as they relate to particular historical periods.
06.11 Identify and apply drafting tools and techniques to a specific design services project.

07.0 Operate and maintain a conventional and commercial/industrial sewing machine – After teacher demonstration, textbook/multi-media research or following manufacturer's instructions, the student will be able to:
07.01 Identify the process and demonstrate needle insertion, selecting the needle that is appropriate for various fabrics.
07.02 Identify the steps and demonstrate threading the sewing machine.
07.03 Diagram and demonstrate bobbin winding, threading the bobbin case and inserting the bobbin correctly into the sewing machine.
07.04 Demonstrate straight stitching.
07.05 Identify and demonstrate stitch length and width selection.
07.06 Demonstrate utility and decorative stitches.

07.07 Identify the tension and demonstrate tension adjustment.
07.08 Demonstrate cleaning and lubricating the machine following manufacturer's instructions.
07.09 Demonstrate sewing machine light bulb replacement.

08.0 Operate specialty machines (minimum of four machines if available) – After a teacher demonstration the student will be able to identify and operate at least four of the following machines:
08.01 Electronic programmable machines.
08.02 Serger
08.03 Pleater
08.04 Blindstitch machine
08.05 Straight stitch machine
08.06 Chain stitch machine
08.07 Cutting machine
08.08 Bar tack
08.09 Zigzag machine

09.0 Select and prepare materials – The student will be able to:
09.01 Identify and match pattern pieces.
09.02 Read and interpret instructions and specifications.
09.03 Identify fabric content.
09.04 Lay out fabrics according to pattern/teacher instructions.
09.05 Match grain lines and patterns according to pattern/teacher instructions.
09.06 Match plaids, stripes and one-way designs following specified instructions.
09.07 Mark and cut using special tables and cutting equipment.
09.08 Line up notches, dots, or clips according to pattern/teacher instructions.
09.09 Mark fabric for assembly according to pattern/teacher instructions.
09.10 Mark fabric for trims according to pattern/teacher instructions.
09.11 Match thread with fabric synthesizing visual arts knowledge.
09.12 Stitch on woven, stretch, or specialty fabrics using appropriate stitch length for fabrics.
09.13 Identify, select, and use content label(s) according to fabric requirements.

25.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0
25.01 Demonstrate knowledge of arithmetic operations. AF3.2
25.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
25.03 Construct charts/tables/graphs using functions and data. AF3.5

26.0 Demonstrate science knowledge and skills. -- The students will be able to: AF4.0
26.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
26.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

27.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:
27.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
27.02 Locate, organize and reference written information from various sources. CM 3.0

27.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
27.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
27.05 Apply active listening skills to obtain and clarify information. CM 7.0
27.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
27.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Principles of Interior Design Services**
Course Number: **8506540**
Course Credit: **1**

Course Description:

This course is the second course in the Interior Design Services program. It is designed to further develop competencies in the area of interior design services. It includes employment opportunities in interior design services, basic skills essential to working in this industry, employability skills, the elements and principles of design, sales techniques and entrepreneurship.

02.0 Demonstrate appropriate basic skills essential to working in occupations in Interior Design Services – The student will be able to:
 02.01 Identify the mathematics knowledge, skills, and attitudes necessary to perform the occupational tasks.
 02.02 Identify the scientific knowledge, skills, and attitudes necessary to perform the occupational tasks.
 02.03 Demonstrate math competencies necessary to perform the occupational tasks.
 02.04 Demonstrate scientific competencies necessary to perform the occupational tasks.
 02.05 Distinguish between specifics of individual vs. mass production design needs.

10.0 Identify employment opportunities in Interior Design Services – The student will be able to:
 10.01 Identify occupations in Interior Design Services.
 10.02 Identify personal skills and interests that may lead to a career exploration related to Interior Design Services.
 10.03 Identify levels of training required for occupations in Interior Design Services.
 10.04 Identify duties and responsibilities for occupations in Interior Design Services.
 10.05 Identify ways to achieve job advancement in Interior Design Services occupations.
 10.06 Identify career options in Interior Design Services such as entrepreneurship.
 10.07 Analyze current trends as they may affect the future of occupations in Interior Design Services.
 10.08 Identify different earning and wage level options for occupations in Interior Design Services.

11.0 Identify and exhibit employment skills for occupations related to Interior Design Services – The student will be able to:
 11.01 Identify and list documents that may be required when applying for a job.
 11.02 Complete a job application form accurately.
 11.03 Demonstrate competence in job interview techniques using role playing techniques.
 11.04 Identify and demonstrate appropriate responses to criticism from an employer, supervisor, or co-worker.
 11.05 Identify and demonstrate acceptable work habits including a positive attitude.

11.06 Demonstrate knowledge of how to make job changes appropriately.
11.07 Identify and describe acceptable employee health and hygiene habits.
11.08 Demonstrate customer relations skills synthesizing given instructions.
11.09 Develop and create a resume’ and portfolio following a given format.

12.0 Demonstrate an understanding of the elements and principles of design – After teacher demonstration, textbook/multimedia research or professional presentation, the student will be able to:
12.01 Identify and explain the elements of design and how various effects can be achieved in relation to Interior Design Services through written/oral reporting or demonstrations: texture, pattern, line, form and shape, space, color, and light
12.02 Identify and explain the principles of design and how they can be used effectively in Interior Design Services using a variety of research and reporting methods: proportion, scale, balance, rhythm, emphasis, and harmony.
12.03 Apply the elements and principles of design to Interior Design Services.
12.04 Develop a plan applying color and color schemes in a design.
12.05 Evaluate good design by using the laws of design.

13.0 Demonstrate sales techniques in Interior Design Services – The student will be able to:
13.01 Identify, ask, and answer questions coherently and concisely.
13.02 Read and follow written instructions and listen to and follow oral instructions.
13.03 Give sales presentations orally and in writing.
13.04 Find information on sales products and services.
13.05 Research and recommend products used in Interior Design Services that meet the customer’s needs based upon customer specifications.
13.06 Demonstrate appropriate computer and telecommunication skills.
13.07 Perform sales transactions using computer skills.
13.08 Recognize the importance of a sense of responsibility and ethical behavior in the Interior Design Services industry.

14.0 Demonstrate an understanding of entrepreneurship – The student will be able to:
14.01 Define entrepreneurship.
14.02 Debate the advantages and disadvantages of business ownership through a written or oral presentation.
14.03 Identify and describe, orally or in writing, the characteristics and responsibilities of an entrepreneur.

28.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0
28.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
28.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
28.03 Present information formally and informally for specific purposes and audiences. AF2.9

29.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:
29.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
29.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
29.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
29.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

30.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:

30.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
30.02 Explain emergency procedures to follow in response to workplace accidents.
30.03 Create a disaster and/or emergency response plan.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Interior Design Techniques**
Course Number: **8506550**
Course Credit: **1**

Course Description:

This course is the third course in the Interior Design Services program. It is designed to further develop competencies in the area of interior design services. It includes components of the design process, the effect of history and culture on design, sketching and free hand drawing, the impact of human, environmental and ergonomic factors on design, rendering techniques, and the development of a design project.

15.0 Identify and describe components of the design process -- The student will be able to:
  15.01 Recognize the steps in the design process.
  15.02 Given a simple problem develop a flow chart that illustrates the steps in a design process. (the steps include: determine the need, brainstorm, design the brief, research, plan, fabricate, and evaluate.
  15.03 Conduct a presentation.

16.0 Research how design is affected by history and culture -- The student will be able to:
  16.01 Identify design periods from 1900 to the present day.
  16.02 Explain the influence of earlier design periods on present day design.
  16.03 Describe the elements and principles of design as they relate to a particular time period/culture.
  16.04 Create a multi-media presentation detailing the design period selected.

17.0 Demonstrate sketching and free hand drawing skills -- The student will be able to:
  17.01 Demonstrate sketching and shading techniques.
  17.02 Create mats or frames to display the sketches and drawings.
  17.03 Select and develop a design project using sketching and shading techniques to be used in portfolio.

18.0 Demonstrate the ability to use Interior Design Services software – The student will be able to:
  18.01 Research and list software available in the area of interior design.
  18.02 Identify and discuss the benefits of using software in today’s work place.
  18.03 Read and interpret a blueprint.
  18.04 Evaluate floor plans for the purpose of interior décor and design.
  18.05 Illustrate size and scale in a drawing.

19.0 Explain how human, environmental, and ergonomic factors impact design solutions -- The student will be able to:
  19.01 List human factors that could impact a design.
  19.02 Demonstrate knowledge of how the dimensions of the human body affect the outcome of a specific design project.
  19.03 Plan and implement a design project using a specific human, environmental or ergonomic factor.

19.04 Examine the positive and negative impact that a design concept has had on the environment.

20.0 Demonstrate knowledge of rendering techniques for presentations -- The student will be able to:

20.01 Given established criteria, apply all learned rendering skills to create a high quality presentation.

21.0 Plan and develop a design project -- The student will be able to:

21.01 Plan and report on a design project, using established criteria.
21.02 Calculate the areas, sizes, circumferences, square footage, etc. of a design project.
21.03 Develop a design project using drafting techniques.

31.0 Use information technology tools. -- The students will be able to:

31.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
31.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
31.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
31.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

32.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:

32.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
32.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
32.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
32.04 Interpret and explain written organizational policies and procedures. ELR 2.0

33.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:

33.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
33.02 Describe the effect of money management on personal and career goals. FL 3.0
33.03 Develop a personal budget and financial goals. FL3.1
33.04 Complete financial instruments for making deposits and withdrawals. FL3.2
33.05 Maintain financial records. FL3.3
33.06 Read and reconcile financial statements. FL3.4
33.07 Research, compare and contrast investment opportunities.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Interior Design Specialist**
Course Number: **8506560**
Course Credit: **1**

Course Description:

This course is the fourth course in the Interior Design Services program. It is designed to further develop competencies in the area of interior design services. This course focuses on four specialty areas of interior design services: kitchen and bath planning; floor, wall, and window treatments; furniture, lighting and accessories; and audio visual and security systems. Students will select on one of those specialty areas and will be expected to follow the performance standards for that area. Students will develop a design project and finalize and submit a portfolio.

22.0 Identify and describe the different specialties related to Interior Design Services (Kitchen and bath; floor, wall and window treatments; furniture, lighting, and accessories; and audio-visual and security – The student will be able to:
- 22.01 Identify future trends in interior décor and design.
- 22.02 Research, identify and describe the different job responsibilities of a kitchen and bath planner; a floor covering/window and wall treatment consultant; a furniture, lighting and accessory specialist; and an audio visual and security system specialist.

Select one specialty area (listed below) and complete the student performance standards for that area:

Kitchen and Bath
- 22.03 Identify principles and elements of kitchen and bath design.
- 22.04 Identify space planning criteria used in kitchen and bath design.
- 22.05 Identify safety guidelines for materials used in kitchen and bath designs.
- 22.06 Analyze fixtures, equipment, appliances, carpentry, cabinets, surfaces and finished materials as well as mechanical and electrical systems used in kitchen and bath designs.
- 22.07 Research new trends in kitchen and bath.
- 22.08 Demonstrate knowledge of kitchen and bath design as they relate to the total residential floor plan.

Floor, Window, and Wall Treatments
- 22.09 Identify and describe the characteristics of different types of floor coverings.
- 22.10 List and compare durability and maintenance factors for floor covering materials.
- 22.11 Develop criteria for the selection of floor coverings; include considerations of color, texture, type, style, pattern, client's life style, energy conservation, and environmental safety using multiple resources.
- 22.12 Measure and calculate space and materials for a floor covering application based upon client criteria written in a report format.
- 22.13 Identify and describe characteristics of different types of wall treatments.
- 22.14 Compare durability and maintenance factors for wall treatment materials.

22.15 Develop criteria for the selection of wall treatments; include considerations of color, texture, type, and style, pattern, client's life style, energy conservation, and environmental safety.
22.16 Identify and describe different types and functions of windows and window treatments.
22.17 Categorize window treatments as drapery or nondrapery.
22.18 Identify and describe the characteristics of nondrapery treatments.
22.19 Identify and describe the characteristics of fabrics used for window treatments.
22.20 Describe the characteristics of draperies and their headings.
22.21 Recognize the different types and uses of appropriate hardware for window treatments.
22.22 Identify and describe in writing window treatment styles.
22.23 Compare durability and maintenance factors for window treatment materials.
22.24 Develop criteria for the selection of window treatments; include considerations of color, texture, type, style, pattern, client's life style, energy conservation, and environmental safety.
22.25 Demonstrate knowledge of floor, window, and wall treatments as they relate to the total residential floor plan.

Furniture, Lighting and Accessories

22.26 Identify and describe the historical characteristics of furniture styles.
22.27 Identify and describe the methods of furniture construction.
22.28 Compare and contrast types of wood and illustrate comparisons in an informal presentation, written report, or computerized presentation.
22.29 Describe the types of finishes and the care required for each one.
22.30 Compare and contrast man-made fibers (i.e. polyester, metal, synthetic plastic) with natural materials (i.e. cotton, wood, leather) used in furniture construction.
22.31 Identify and describe different accessories for home/office/ function or appropriate setting for an oral presentation.
22.32 Demonstrate appropriate groupings and the placement of
22.33 Identify and describe different types of lighting fixtures and light bulbs.
22.34 Select and identify appropriate lighting for specific spaces to include general, task, and ambiance, considering life-styles and energy conservation specifications.
22.35 Demonstrate knowledge of furniture, lighting, and accessories as they relate to the total residential floor plan.

Audio Visual and Security Systems

22.36 Identify and select materials and finishes for environments requiring acoustic specifications.
22.37 Develop criteria for the selection of audio visual and security systems for specific spaces considering life style and energy conservation or as required by local ordinance or state code.
22.38 Demonstrate knowledge of audio visual and security systems as they relate to the total residential floor plan.

23.0 Plan and develop a complete design project in a specialty selected to meet client's requirements and criteria – The student will be able to:

23.01 Read and interpret a blueprint for this specific project.
23.02 Plan and write a design project for a specific client profile, applying the elements and principles of design.

23.03 Calculate areas, sizes, circumferences, square footage, etc. of the design project.
23.04 Select appropriate materials and products for the project.
23.05 Measure and calculate the materials needed for client specified project.
23.06 Estimate the number of products needed for the client project.
23.07 Determine the budgetary limitations of the client.
23.08 Estimate the cost required to implement the plan and evaluate the estimate in relation to the client's budget.
23.09 Create a presentation board and make an oral presentation to the client.

24.0 (Optional) Schedule and participate in Interior Design Services job shadowing – The student will be able to:
24.01 Research persons working in the Interior Design Services profession within the local area.
24.02 Formalize in writing, a job shadowing experience, applying knowledge gained within the program and using the guidelines set by the district, instructor and employer and using knowledge synthesized within the program.

25.0 Finalize a portfolio per industry standards – The student will be able to:
25.01 Submit a portfolio including all work from the Interior Design Services program.

34.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:
34.01 Describe the nature and types of business organizations. SY 1.0
34.02 Explain the effect of key organizational systems on performance and quality.
34.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
34.04 Explain the impact of the global economy on business organizations. **HE 2.0**

35.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:
35.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
35.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
35.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
35.04 Employ mentoring skills to inspire and teach others. LT 5.0

36.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:
36.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
36.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
36.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
36.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
36.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
36.06 Identify and exhibit traits for retaining employment. ECD 7.0
36.07 Identify opportunities and research requirements for career advancement. ECD 8.0
36.08 Research the benefits of ongoing professional development. ECD 9.0
36.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Interior Décor Fabrication**
Program Type:	**Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8521040	V200505
CIP Number	0420050210	0420050210
Grade Level	9-12, 30, 31	30, 31
Standard Length	3 Credits	1050 Hours
Teacher Certification	HOMEMAKING @2 ¢7 VOC HME EC @4 HOME EC @2 HME EC OCC ¢7 FAM CON SC 1	HOMEMAKING ¢7 @2 @7 G VOC HME EC @2 @4 HOME EC @2 HME EC OCC ¢7 @7 G FAM CON SC 1 GEN HME EC @2 INT DEC 7G
CTSO	FCCLA	FCCLA
SOC Codes (all applicable)	51-6031 27-1025	51-6031 27-1025
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for employment or advanced training in the interior-decorating fabrication industry.

This program focuses on broad, transferable skills, stresses the understanding of all aspects of the interior-decorating fabrication industry, and demonstrates such elements of the industry as planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

Introduction to Interior Decor Fabrication 1 through 3 (OCP A) may be offered at both secondary and postsecondary adult vocational (PSAV) levels. However, OCP B and OCP C can only be offered at the PSAV level.

Program Structure

This program is a planned sequence of instruction consisting of three Occupational Completion Points (OCP).

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	HEV0420	Sewing Machine Operator, Nongarment	450 Hours	51-6031
B	HEV0450	Drapery Operator	150 Hours	51-6099
C	HEV0451	Drapery Supervisor	450 Hours	51-6099

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8521041	Introduction to Interior Decor Fabrication 1	1 Credit	51-6031	2
	8521042	Introduction to Interior Decor Fabrication 2	1 Credit		2
	8521043	Introduction to Interior Decor Fabrication 3	1 Credit		2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate leadership and membership skills.
02.0 Describe the basic characteristics of interior fabrication.
03.0 Demonstrate safety and sanitation skills.
04.0 Select and use tools and equipment.
05.0 Demonstrate power-machinery operation skills.
06.0 Exhibit employability skills.
07.0 Measure, plot, mark, and cut fabric.
08.0 Operate power machinery for interior fabrications.
09.0 Demonstrate sales skills.
10.0 Design and plan a fabrication project.
11.0 Maintain power machinery.
12.0 Demonstrate employability skills.
13.0 Demonstrate sales techniques for interior fabrication.
14.0 Identify drapery hardware.
15.0 Design and construct shirred draperies.
16.0 Design and construct pleated draperies.
17.0 Describe the basic principles of color and design.
18.0 Design and apply special construction techniques.
19.0 Design and construct top treatments.
20.0 Design and construct bed treatments.
21.0 Design and construct decorative accessories and update previously upholstered items.
22.0 Design and apply quality-control management skills.
23.0 Demonstrate an understanding of entrepreneurship.
24.0 Demonstrate mathematics knowledge and skills.
25.0 Demonstrate science knowledge and skills
26.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
27.0 Demonstrate language arts knowledge and skills
28.0 Solve problems using critical thinking skills, creativity and innovation.
29.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance
30.0 Use information technology tools
31.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
32.0 Demonstrate personal money-management concepts, procedures, and strategies
33.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
34.0 Describe the importance of professional ethics and legal responsibilities.
35.0 Explain the importance of employability and entrepreneurship skills

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Interior Decor Fabrication**
PSAV Number: **V200505**

Course Number: HEV0420
Occupational Completion Point: A
Sewing Machine Operator, Nongarment – 450 Hours – SOC Code 51-6031

01.0 Demonstrate leadership and membership skills --The student will be able to:
01.01 Identify professional and youth organizations.
01.02 Identify purposes and functions of professional and youth organizations.
01.03 Identify roles and responsibilities of members of professional and youth organizations.
01.04 Work cooperatively as a group member to achieve organizational goals.
01.05 Demonstrate confidence in leadership roles and organizational responsibilities.
01.06 Demonstrate commitment to achieve organizational goals.

02.0 Describe the basic characteristics of interior fabrication --The student will be able to:
02.01 Identify and describe the basic characteristics and uses of textiles:
- Name of fiber
- Characteristics of fiber
- Care requirements according to the manufacturer's cleaning codes
- Suitability for window treatments, slipcovers, upholstery, bedspreads, and accessories

02.02 Identify and describe the basic characteristics and uses of window treatments and accessories.
02.03 Identify and describe various interior-decorating styles.

03.0 Demonstrate safety and sanitation skills --The student will be able to:
03.01 Research and follow standard (federal, state, and local) fire, safety, and sanitation practices.
03.02 Identify safety standards and perform a routine safety inspection of work areas.
03.03 Identify disaster-plan procedures and follow standard disaster-plan procedures within the workplace setting.
03.04 Identify hazardous materials and follow safety procedures when using and disposing of hazardous materials (Florida's "Right-to-Know" Law).
03.05 Explain health-related problems caused by exposure to hazardous materials.
03.06 Describe eligibility requirements and the basic procedures for obtaining Worker's Compensation.

04.0 Select and use tools and equipment -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer’s instructions the student will be able to:
04.01 Identify the tools, machinery, and equipment used for design and fabrication.
04.02 Select the tools and equipment necessary for assigned projects.
04.03 Demonstrate the correct and safe use of various fabrication tools and equipment.
04.04 Clean and maintain various types of tools and equipment.

05.0 Demonstrate power-machinery operation skills -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer’s instructions the student will be able to:
- 05.01 Identify and describe the various types and functions of machines used in interior decor fabrication.
- 05.02 Identify and describe the main parts and functions of power machines.
- 05.03 Identify, select, and insert various machine needles for the fabric and project.
- 05.04 Diagram and thread sewing machines following the manufacturer’s instructions.
- 05.05 Demonstrate the ergonomically correct sitting posture when operating machines.

06.0 Exhibit employability skills --The student will be able to:
- 06.01 Identify and demonstrate acceptable personal hygiene and a professional appearance.
- 06.02 Identify and demonstrate productive work habits and positive attitudes.
- 06.03 Identify and apply the principles of time management, work simplification, and teamwork when performing assigned tasks.
- 06.04 List quality characteristics and demonstrate pride in the quality of work performed.

07.0 Measure, plot, mark, and cut fabric -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer’s instructions the student will be able to:
- 07.01 Read, interpret, and follow instructions for a project.
- 07.02 Read and interpret charts, diagrams, and tables.
- 07.03 Apply the principles of design in matching fabrics with nap, stripes, plaids, repeat pattern, and fabric width.
- 07.04 Evaluate the quality of the fabric, examining it for flaws.
- 07.05 Organize the work area for the efficient use of time and motion.
- 07.06 Measure and plot a pattern according to sample directions.
- 07.07 Measure the item and compute fabric needs for a specific project.
- 07.08 Cut the fabric to calculated specifications.

08.0 Operate power machinery for interior fabrications -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer’s instructions the student will be able to:
- 08.01 Select appropriate thread for the machine and the project.
- 08.02 Identify and attach the appropriate presser foot for the fabric and project.
- 08.03 Operate power machinery with speed and accuracy, observing previously identified safety precautions.

09.0 Demonstrate sales skills -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer’s instructions the student will be able to:
- 09.01 Read and interpret pricing tables and diagrams of products.
- 09.02 Fill out sales receipts, purchase orders, and invoices.
- 09.03 Identify characteristics of a quality sales person and exhibit these characteristics in a workplace setting.
- 09.04 Identify and demonstrate appropriate responses to criticism and praise.
- 09.05 Explain the relationship between positive human relations and success in the industry.
- 09.06 Demonstrate respect for the customer's desires and property.

10.0 Design and plan a fabrication project -- The student will be able to:
10.01 Design and plan a fabrication project according to established criteria.
10.02 Select the appropriate styles and materials, considering energy efficiency and safety factors, for the project.
10.03 Calculate the cost of materials and labor for the project.

11.0 Maintain power machinery --The student will be able to:
11.01 Oil and clean machines, using the manufacturer's manual as a guide.
11.02 Identify and describe the possible causes of machine malfunction using the manufacturer's manual as a guide.
11.03 Make minor adjustments to machinery, using the manufacturer's manual as a guide and following safety precautions.
11.04 Keep a maintenance record of tools and equipment following the manufacturer's recommended maintenance schedule.

12.0 Demonstrate employability skills --The student will be able to:
12.01 Conduct a job search and identify advanced-training opportunities.
12.02 Secure information about a job.
12.03 Identify documents that may be required for a job application.
12.04 Research and complete a job-application form.
12.05 Identify and demonstrate competence in job-interview techniques.
12.06 Demonstrate knowledge of how to make job changes appropriately.
12.07 Identify and demonstrate ethical and responsible practices.
12.08 Identify and describe the importance of a drug-free workplace and the industry policies toward drug use.
12.09 Identify and describe the importance of keeping a good driving record on employment opportunities.
12.10 Locate and describe Florida's "Right-to-Know" Law, as recorded in the Florida Statutes, Chapter 442.
12.11 Explain the importance of confidentiality in the workplace.

24.0 Demonstrate mathematics knowledge and skills. -- The students will be able to: AF3.0
24.01 Demonstrate knowledge of arithmetic operations. AF3.2
24.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
24.03 Construct charts/tables/graphs using functions and data. AF3.5

25.0 Demonstrate science knowledge and skills. -- The students will be able to: AF4.0
25.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
25.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

26.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas. -- The students will be able to:
26.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
26.02 Locate, organize and reference written information from various sources. CM 3.0
26.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
26.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0

26.05 Apply active listening skills to obtain and clarify information. CM 7.0
26.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
26.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

27.0 Demonstrate language arts knowledge and skills. -- The students will be able to: AF 2.0
27.01 Locate, comprehend and evaluate key elements of oral and written information.AF2.4
27.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
27.03 Present information formally and informally for specific purposes and audiences.AF2.9

28.0 Solve problems using critical thinking skills, creativity and innovation. -- The students will be able to:
28.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
28.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
28.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
28.04 Conduct technical research to gather information necessary for decision-making.PS 4.0

29.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. -- The students will be able to:
29.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
29.02 Explain emergency procedures to follow in response to workplace accidents.
29.03 Create a disaster and/or emergency response plan.

Course Number: HEV0450
Occupational Completion Point: B
Drapery Operator – 150 Hours – SOC Code 27-1025 (Interior Designer)

13.0 Demonstrate sales techniques for interior fabrication --The student will be able to:
13.01 Ask and answer questions coherently and concisely.
13.02 Design and give a sales presentation orally and in writing.
13.03 Using quality guidelines and art principles, locate information on sales products and services according to client specifications.
13.04 Recommend fabric, styles, and related products to meet the customer's needs.
13.05 Demonstrate appropriate computer and telecommunication skills.
13.06 Demonstrate sales-transaction skills.

14.0 Identify drapery hardware -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer’s instructions the student will be able to:
14.01 Identify and describe the parts, types, and characteristics of drapery hardware.
14.02 Explain how the hardware affects drapery construction, including pin setting.
14.03 Measure and install basic drapery hardware following the manufacturer’s directions/visual application.
14.04 Identify, select and install proper screws, toggle bolts and wall anchors for various types of walls.

14.05 Demonstrate method of correctly installing hardware for rod pocket and pleated draperies according to manufacturer's instructions.

15.0 Design and construct shirred draperies -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's/sample instructions the student will be able to:

15.01 Measure the window area and calculate fabric needs according to customer specifications.
15.02 Prepare materials and the work site for construction using prior knowledge of construction techniques.
15.03 Perform basic hand and machine stitches following ample instructions.
15.04 Construct plain, serged, and French seams following sample instructions.
15.05 Perform pressing techniques matching pressing to fabric requirements.
15.06 Select a hem and weights to match fabric specifications.
15.07 Apply lining-construction techniques following customer specifications.
15.08 Table the draperies to determine hems and top headings.
15.09 Sew hems and top headings following textbook/teacher instructions.
15.10 Press and prepare draperies for delivery according to fabric requirements.
15.11 Design and construct tiebacks following pattern directions.
15.12 After identifying quality characteristics, perform a quality check.

16.0 Design and construct pleated draperies -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:

16.01 Measure the window area and calculate fabric needs according to customer specifications.
16.02 Perform basic hand and machine stitches according to sample/manufacturer's instructions.
16.03 Design and construct plain, serged, and French seams following sample instructions.
16.04 Perform preliminary pressing techniques matching pressing to fabric.
16.05 Select hem and weights to match fabric specifications.
16.06 Apply lining-construction techniques following fabric/customer requirements.
16.07 Table draperies to determine hems and top headings.
16.08 Calculate, plot, mark, and sew pleats following sample instructions.
16.09 Set pins according to fabric requirements.
16.10 Press and fold draperies for delivery according to fabric care.

30.0 Use information technology tools. -- The students will be able to:

30.01 Use personal information management (PIM) applications to increase workplace efficiency. IT 1.0
30.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
30.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
30.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

32.0 Demonstrate personal money-management concepts, procedures, and strategies. -- The students will be able to:
- 32.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 32.02 Describe the effect of money management on personal and career goals. FL 3.0
- 32.03 Develop a personal budget and financial goals. FL3.1
- 32.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 32.05 Maintain financial records. FL3.3
- 32.06 Read and reconcile financial statements. FL3.4
- 32.07 Research, compare and contrast investment opportunities

34.0 Describe the importance of professional ethics and legal responsibilities. -- The students will be able to:
- 34.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 34.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 34.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 34.04 Interpret and explain written organizational policies and procedures. ELR 2.0

Course Number: HEV0451
Occupational Completion Point: C
Drapery Supervisor/Consultant – 450 Hours – SOC Code 27-1025 (Interior Designer)

17.0 Describe the basic principles of color and design -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer’s instructions the student will be able to:
- 17.01 Identify the elements and principles of design.
- 17.02 Apply the elements and principles of design to housing environments.
- 17.03 Apply the use of color and color schemes in design.

18.0 Design and apply special construction techniques -- After a teacher demonstration, textbook/multimedia research or following sample/pattern/manufacturer’s instructions the student will be able to:
- 18.01 Measure the window area and calculate fabric needs according to customer specifications.
- 18.02 Gather or shirr fabric by machine and by hand according to visual/sample/pattern instructions.
- 18.03 Construct ruffles according to pattern instructions.
- 18.04 Make and cut straight and bias welt cording according to sample instructions.
- 18.05 Construct closures (commercial zippers, buttonholes, Velcro, and snaps) according to customer’s requirements.
- 18.06 Make and use patterns and templates according to customer specifications.
- 18.07 Using Auto CAD design a pattern template for a window treatment according to customer specifications.

19.0 Design and construct top treatments -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer’s instructions the student will be able to:
- 19.01 Measure the window area and calculate fabric needs according to customer specifications.

19.02 Identify and describe the types and characteristics of top treatments, such as: Valances, Cascades, swags, jabots, Austrian, R oman, hobbled, balloon, and laminated shades, cornices and lambrequins
19.03 Select mounting methods for different types of top treatments according to wall type.
19.04 Calculate, plot the design, and cut the fabric for specific top treatments.
19.05 Identify and describe various methods of installation in relation to mounting surfaces.
19.06 Construct top treatments following pattern/customer specifications.
19.07 Prepare top treatment for appropriate installation according to required installation requirements.

20.0 Design and construct bed treatments -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:
20.01 Measure the areas and calculate fabric needs according to customer specifications.
20.02 Identify various styles and types of quilting, and explain how they affect fabric needs and durability.
20.03 Construct bedspreads, comforters, duvets, pillow shams, bed canopies, and bed skirts following pattern/manufacturer's/customer's specifications.

21.0 Design and construct decorative accessories and update previously upholstered items -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:
21.01 Measure the items and calculate fabric needs according to manufacturer's/customer specifications.
21.02 Design and construct custom home accessories, such as pillows, boxed cushions, tablecloths, napkins, lampshade covers, chair pads, covered headboards, and specialty tiebacks according to manufacturer/customer specifications.
21.03 Apply decorative trims, such as beads, bias cording, tassels, and fringe using visual arts principals.
21.04 Mark fabric for stripping following prescribed guidelines.
21.05 Tear down covering following proper procedures.

22.0 Design and apply quality-control management skills --The student will be able to:
22.01 Identify and describe quality-control standards.
22.02 Evaluate the quality of the products, applying quality-control standards synthesized from presentations/research/practical applications.

23.0 Demonstrate an understanding of entrepreneurship --The student will be able to:
23.01 Define "entrepreneurship."
23.02 Identify and describe the importance of entrepreneurship to the American economy and the role of small business in the free-enterprise system.
23.03 Identify and describe the advantages and disadvantages of business ownership and the different types of business entities.
23.04 Explain the risks involved in the ownership of a business.
23.05 Identify and describe the personal characteristics of a successful entrepreneur.
23.06 Identify the skills needed to operate a small business efficiently and effectively, including computer skills.

23.07 Describe the responsibility of the employer to support the business.

31.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:

31.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
31.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
31.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
31.04 Employ mentoring skills to inspire and teach others. LT 5.0

33.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:

33.01 Describe the nature and types of business organizations. SY 1.0
33.02 Explain the effect of key organizational systems on performance and quality.
33.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
33.04 Explain the impact of the global economy on business organizations**.** **HE 2.0**

34.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:

34.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
34.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
34.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
34.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
34.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
34.06 Identify and exhibit traits for retaining employment. ECD 7.0
34.07 Identify opportunities and research requirements for career advancement. ECD 8.0
34.08 Research the benefits of ongoing professional development. ECD 9.0
34.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Introduction to Interior Decor Fabrication 1**
Course Number: **8521041**
Course Credit: **3**

Course Description:

This course is designed to help students develop competencies in the areas of basic characteristics of interior fabrication, safety, tools and equipment, basic skills in power machinery operation, and employability skills.

01.0 Demonstrate leadership and membership skills --The student will be able to:
  01.01 Identify professional and youth organizations.
  01.02 Identify purposes and functions of professional and youth organizations.
  01.03 Identify roles and responsibilities of members of professional and youth organizations.
  01.04 Work cooperatively as a group member to achieve organizational goals.
  01.05 Demonstrate confidence in leadership roles and organizational responsibilities.
  01.06 Demonstrate commitment to achieve organizational goals.

02.0 Describe the basic characteristics of interior fabrication --The student will be able to:
  02.01 Identify and describe the basic characteristics and uses of textiles:
  - Name of fiber
  - Characteristics of fiber
  - Care requirements according to the manufacturer's cleaning codes
  - Suitability for window treatments, slipcovers, upholstery, bedspreads, and accessories

  02.02 Identify and describe the basic characteristics and uses of window treatments and accessories.
  02.03 Identify and describe various interior-decorating styles.

03.0 Demonstrate safety and sanitation skills --The student will be able to:
  03.01 Research and follow standard (federal, state, and local) fire, safety, and sanitation practices.
  03.02 Identify safety standards and perform a routine safety inspection of work areas.
  03.03 Identify disaster-plan procedures and follow standard disaster-plan procedures within the workplace setting.
  03.04 Identify hazardous materials and follow safety procedures when using and disposing of hazardous materials (Florida's "Right-to-Know" Law).
  03.05 Explain health-related problems caused by exposure to hazardous materials.
  03.06 Describe eligibility requirements and the basic procedures for obtaining Worker's Compensation.

04.0 Select and use tools and equipment -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer’s instructions the student will be able to:
  04.01 Identify the tools, machinery, and equipment used for fabrication.

04.02 Select the tools and equipment necessary for assigned projects.
04.03 Demonstrate the correct and safe use of various fabrication tools and equipment.
04.04 Clean and maintain various types of tools and equipment.

05.0 Demonstrate power-machinery operation skills -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer's instructions the student will be able to:
05.01 Identify and describe the various types and functions of machines used in interior decor fabrication.
05.02 Identify and describe the main parts and functions of power machines.
05.03 Identify, select, and insert various machine needles for the fabric and project.
05.04 Diagram and thread sewing machines following the manufacturer's instructions.
05.05 Demonstrate the ergonomically correct sitting posture when operating machines.

06.0 Exhibit employability skills --The student will be able to:
06.01 Identify and demonstrate acceptable personal hygiene and a professional appearance.
06.02 Identify and demonstrate productive work habits and positive attitudes.
06.03 Identify and apply the principles of time management, work simplification, and teamwork when performing assigned tasks.
06.04 List quality characteristics and demonstrate pride in the quality of work performed in work setting.

07.0 Measure, plot, mark, and cut fabric -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer's instructions the student will be able to:
07.01 Read, interpret, and follow instructions for a project.
07.02 Read and interpret charts, diagrams, and tables.
07.03 Apply the principles of design in matching fabrics with nap, stripes, plaids, repeat pattern, and fabric width.
07.04 Evaluate the quality of the fabric, examining it for flaws.
07.05 Organize the work area for the efficient use of time and motion.
07.06 Measure and plot a pattern according to sample directions.
07.07 Measure the item and compute fabric needs for a specific project.
07.08 Cut the fabric to calculated customer specifications.

08.0 Operate power machinery for interior fabrications -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer's instructions the student will be able to:
08.01 Select appropriate thread for the machine and the project.
08.02 Identify and attach the appropriate presser foot for the fabric and project.
08.03 Operate power machinery with speed and accuracy, observing previously identified safety precautions.

09.0 Demonstrate sales skills -- After a teacher demonstration, textbook/multimedia research, or following the manufacturer's instructions the student will be able to:
09.01 Read and interpret pricing tables and diagrams of products.
09.02 Fill out sales receipts, purchase orders, and invoices.
09.03 Identify characteristics of a quality sales person and exhibit these characteristics in a workplace setting.
09.04 Identify and demonstrate appropriate responses to criticism and praise.

09.05 Explain the relationship between positive human relations and success in the industry.
09.06 Demonstrate respect for the customer's desires and property.

10.0 Design and Plan a fabrication project --The student will be able to:
10.01 Plan and Design a fabrication project according to established criteria.
10.02 Select the appropriate styles and materials, considering energy efficiency and safety factors, for the project.
10.03 Calculate the cost of materials and labor for the project.

11.0 Maintain power machinery --The student will be able to:
11.01 Oil and clean machines, using the manufacturer's manual as a guide.
11.02 Identify and describe the possible causes of machine malfunction using the manufacturer’s manual as a guide.

12.0 Demonstrate employability skills --The student will be able to:
12.01 Conduct a job search and identify advanced-training opportunities.
12.02 Secure information about a job.
12.03 Identify documents that may be required for a job application.
12.04 Research and complete a job-application form.
12.05 Identify and demonstrate competence in job-interview techniques.
12.06 Demonstrate knowledge of how to make job changes appropriately.
12.07 Identify and demonstrate ethical and responsible practices.
12.08 Identify and describe the importance of a drug-free workplace and the industry policies toward drug use.
12.09 Identify and describe the importance of keeping a good driving record on employment opportunities.
12.10 Locate and describe Florida's "Right-to-Know" Law, as recorded in the Florida Statutes, Chapter 442.
12.11 Explain the importance of confidentiality in the workplace.

24.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
24.01 Demonstrate knowledge of arithmetic operations. AF3.2
24.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
24.03 Construct charts/tables/graphs using functions and data. AF3.5

25.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
25.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
25.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

26.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
26.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
26.02 Locate, organize and reference written information from various sources. CM 3.0
26.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
26.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0

26.05 Apply active listening skills to obtain and clarify information. CM 7.0
26.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
26.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

27.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
27.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
27.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
27.03 Present information formally and informally for specific purposes and audiences. AF2.9

28.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
28.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
28.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
28.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
28.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

29.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
29.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
29.02 Explain emergency procedures to follow in response to workplace accidents.
29.03 Create a disaster and/or emergency response plan.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Introduction to Interior Decor Fabrication 2**
Course Number: **8521042**
Course Credit: **1**

Course Description:

This course is designed to help students develop competencies in the areas of working with fabric, operating power machinery, and basic sales skills.

13.0 Demonstrate sales techniques for interior fabrication --The student will be able to:
- 13.01 Ask and answer questions coherently and concisely.
- 13.02 Design and give a sales presentation orally and in writing.
- 13.03 Using quality guidelines and art principles, locate information on sales products and services according to client specifications.
- 13.04 Recommend fabric, styles, and related products to meet the customer's needs.
- 13.05 Demonstrate appropriate computer and telecommunication skills.
- 13.06 Demonstrate sales-transaction skills.

14.0 Identify drapery hardware -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer’s instructions the student will be able to:
- 14.01 Identify and describe the parts, types, and characteristics of drapery hardware.
- 14.02 Explain how the hardware affects drapery construction, including pin setting.
- 14.03 Measure and install basic drapery hardware following the manufacturer’s directions/ visual application.
- 14.04 Identify, select and install proper screws, toggle bolts and wall anchors for various types of walls.
- 14.05 Demonstrate method of correctly installing hardware for rod pocket and pleated draperies according to manufacturer’s instructions.

15.0 Design and construct shirred draperies -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer’s/sample instructions the student will be able to:
- 15.01 Measure the window area and calculate fabric needs according to customer specifications.
- 15.02 Prepare materials and the work site for construction using prior knowledge of construction techniques.
- 15.03 Perform basic hand and machine stitches following ample instructions.
- 15.04 Construct plain, serged, and French seams following sample instructions.
- 15.05 Perform pressing techniques matching pressing to fabric requirements.
- 15.06 Select a hem and weights to match fabric specifications.
- 15.07 Apply lining-construction techniques following customer specifications.
- 15.08 Table the draperies to determine hems and top headings.
- 15.09 Sew hems and top headings following textbook/teacher instructions.
- 15.10 Press and prepare draperies for delivery according to fabric requirements.
- 15.11 Design and construct tiebacks following pattern directions.
- 15.12 After identifying quality characteristics, perform a quality check.

16.0 Design and construct pleated draperies -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:

16.01 Measure the window area and calculate fabric needs according to customer specifications.
16.02 Perform basic hand and machine stitches according to sample/manufacturer's instructions.
16.03 Design and construct plain, serged, and French seams following sample instructions.
16.04 Perform preliminary pressing techniques matching pressing to fabric.
16.05 Select hem and weights to match fabric specifications.
16.06 Apply lining-construction techniques following fabric/customer requirements.
16.07 Table draperies to determine hems and top headings.
16.08 Calculate, plot, mark, and sew pleats following sample instructions.
16.09 Set pins according to fabric requirements.
16.10 Press and fold draperies for delivery according to fabric care.

30.0 Use information technology tools--The students will be able to:

30.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
30.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
30.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
30.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

31.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

31.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
31.02 Describe the effect of money management on personal and career goals. FL 3.0
31.03 Develop a personal budget and financial goals. FL3.1
31.04 Complete financial instruments for making deposits and withdrawals. FL3.2
31.05 Maintain financial records. FL3.3
31.06 Read and reconcile financial statements. FL3.4
31.07 Research, compare and contrast investment opportunities.

34.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

34.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
34.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
34.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
34.04 Interpret and explain written organizational policies and procedures. ELR 2.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Introduction to Interior Decor Fabrication 3**
Course Number: **8521043**
Course Credit: **3**

Course Description:

This course is designed to help students develop competencies in the areas of fabrication project planning, power machinery maintenance, and employability skills.

17.0 Describe the basic principles of color and design -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:
  17.01 Identify the elements and principles of design.
  17.02 Apply the elements and principles of design to housing environments.
  17.03 Apply the use of color and color schemes in design.

18.0 Design and apply special construction techniques -- After a teacher demonstration, textbook/multimedia research or following sample/pattern/manufacturer's instructions the student will be able to:
  18.01 Measure the window area and calculate fabric needs according to customer specifications.
  18.02 Gather or shirr fabric by machine and by hand according to visual/sample/pattern instructions.
  18.03 Construct ruffles according to pattern instructions.
  18.04 Make and cut straight and bias welt cording according to sample instructions.
  18.05 Construct closures (commercial zippers, buttonholes, Velcro, and snaps) according to customer's requirements.
  18.06 Design and use patterns and templates according to customer specifications.
  18.07 Using Auto CAD design a pattern template for a window treatment according to customer specifications.

19.0 Design and construct top treatments -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:
  19.01 Measure the window area and calculate fabric needs according to customer specifications.
  19.02 Identify and describe the types and characteristics of top treatments, such as: valances cascades, swags, jabots Austrian, roman, hobbled, balloon, and laminated shades, cornices and lambrequins
  19.03 Select mounting methods for different types of top treatments according to wall type.
  19.04 Calculate, plot the design, and cut the fabric for specific top treatments.
  19.05 Identify and describe various methods of installation in relation to mounting surfaces.
  19.06 Design and construct top treatments following pattern/customer specifications.
  19.07 Prepare top treatment for appropriate installation according to required installation requirements.

20.0 Design and construct bed treatments -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:
- 20.01 Measure the areas and calculate fabric needs according to customer specifications.
- 20.02 Identify various styles and types of quilting, and explain how they affect fabric needs and durability.
- 20.03 Design and construct bedspreads, comforters, duvets, pillow shams, bed canopies, and bed skirts following pattern/manufacturer's/customer's specifications.

21.0 Design and construct decorative accessories and update previously upholstered items -- After a teacher demonstration, textbook/multimedia research or following pattern/manufacturer's instructions the student will be able to:
- 21.01 Measure the items and calculate fabric needs according to manufacturer's/customer specifications.
- 21.02 Design and construct custom home accessories, such as pillows, boxed cushions, tablecloths, napkins, lampshade covers, chair pads, covered headboards, and specialty tiebacks according to manufacturer/customer specifications.
- 21.03 Apply decorative trims, such as beads, bias cording, tassels, and fringe using visual arts principals.
- 21.04 Mark fabric for stripping following prescribed guidelines.
- 21.05 Tear down covering following proper procedures.

22.0 Design and apply quality-control management skills --The student will be able to:
- 22.01 Identify and describe quality-control standards.
- 22.02 Evaluate the quality of the products, applying quality-control standards synthesized from presentations/research/practical applications.

23.0 Demonstrate an understanding of entrepreneurship --The student will be able to:
- 23.01 Define "entrepreneurship."
- 23.02 Identify and describe the importance of entrepreneurship to the American economy and the role of small business in the free-enterprise system.
- 23.03 Identify and describe the advantages and disadvantages of business ownership and the different types of business entities.
- 23.04 Explain the risks involved in the ownership of a business.
- 23.05 Identify and describe the personal characteristics of a successful entrepreneur.
- 23.06 Identify the skills needed to operate a small business efficiently and effectively, including computer skills.
- 23.07 Describe the responsibility of the employer to support the business.

31.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives. -- The students will be able to:
- 31.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 31.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 31.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 31.04 Employ mentoring skills to inspire and teach others. LT 5.0

33.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment. -- The students will be able to:

33.01 Describe the nature and types of business organizations. SY 1.0
33.02 Explain the effect of key organizational systems on performance and quality.
33.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
33.04 Explain the impact of the global economy on business organizations. **HE 2.0**

35.0 Explain the importance of employability and entrepreneurship skills. -- The students will be able to:

35.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
35.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
35.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
35.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
35.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
35.06 Identify and exhibit traits for retaining employment. ECD 7.0
35.07 Identify opportunities and research requirements for career advancement. ECD 8.0
35.08 Research the benefits of ongoing professional development. ECD 9.0
35.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Industrial Cooperative Education - OJT**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8700400	I469999
CIP Number	06469999cp	06469999cp
Grade Level	9-12, 30, 31	30, 31
Standard Length	Multiple Credits	Multiple Hours
Teacher Certification	ANY INDUS ED G	ANY INDUS ED G
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	N/A	N/A
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Math 9 Language 9 Reading 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this course is to provide the on-the-job training component in conjunction with a job preparatory program to prepare students for employment in industrial occupations. On-the-Job experiences are provided as an addition to a job preparatory program which will develop occupational competencies required for employment in the occupation chosen by the student as a career choice or to provide experiences that further develop the competencies acquired by the student in an in-school job preparatory program. This program is not intended for supplemental vocational course instruction and shall not be claimed for supplemental FTE purposes.

The course content will include the following: accompanying related instruction; and the applied skill and knowledge required for the chosen occupation.

The course content should also include employability skills; training in communication, leadership, human relations, teamwork; and safe, efficient work practices.

Program Structure

This program is a planned sequence of instruction consisting of Multiple Credits

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	I469999	Industrial Cooperative Education - OJT	Multiple Hours	N/A

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8700400	Industrial Cooperative Education - OJT	Multiple Credits	N/A	N/A

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.
There is a **Cooperative Education Manual** available on-line that has guidelines for students, teachers, employers, parents and other administrators and sample training agreements. It can be accessed on the DOE website at http://www.fldoe.org/workforce/programs/doc/coopm.doc.
.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student’s IEP or 504 plan or postsecondary student’s accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate job-related skills for the chosen occupation.
02.0 Demonstrate mathematics knowledge and skills.
03.0 Demonstrate science knowledge and skills.

04.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
05.0 Demonstrate language arts knowledge and skills.
06.0 Solve problems using critical thinking skills, creativity and innovation.
07.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
08.0 Use information technology tools.
09.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
10.0 Demonstrate personal money-management concepts, procedures, and strategies.
11.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
12.0 Describe the importance of professional ethics and legal responsibilities.
13.0 Explain the importance of employability and entrepreneurship skills.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Industrial Cooperative Education - OJT**
PSAV Number: **I469999**

Course Number: I469999
Occupational Completion Point: A
Industrial Cooperative Education - OJT – Multiple Hours – SOC Code N/A

01.0 Demonstrate job related skills for the chosen occupation --The student will be able to:
  01.01 Demonstrate competencies from appropriate curriculum frameworks/student performance standards, as identified in the student training plan.
02.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
  02.01 Demonstrate knowledge of arithmetic operations. AF3.2
  02.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
  02.03 Construct charts/tables/graphs using functions and data. AF3.5

03.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
  03.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
  03.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

04.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
  04.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
  04.02 Locate, organize and reference written information from various sources. CM 3.0
  04.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
  04.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
  04.05 Apply active listening skills to obtain and clarify information. CM 7.0
  04.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
  04.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

05.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
  05.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
  05.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
  05.03 Present information formally and informally for specific purposes and audiences. AF2.9

06.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
  06.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
  06.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0

06.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
06.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

07.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
07.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
07.02 Explain emergency procedures to follow in response to workplace accidents.
07.03 Create a disaster and/or emergency response plan.

08.0 Use information technology tools--The students will be able to:
08.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
08.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
08.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
08.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

09.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
09.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
09.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
09.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
09.04 Interpret and explain written organizational policies and procedures. ELR 2.0

10.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
10.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
10.02 Describe the effect of money management on personal and career goals. FL 3.0
10.03 Develop a personal budget and financial goals. FL3.1
10.04 Complete financial instruments for making deposits and withdrawals. FL3.2
10.05 Maintain financial records. FL3.3
10.06 Read and reconcile financial statements. FL3.4
10.07 Research, compare and contrast investment opportunities.

11.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
11.01 Describe the nature and types of business organizations. SY 1.0
11.02 Explain the effect of key organizational systems on performance and quality.
11.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
11.04 Explain the impact of the global economy on business organizations. HE 2.0

12.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

12.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
12.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
12.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
12.04 Employ mentoring skills to inspire and teach others. LT 5.0

13.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

13.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
13.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
13.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
13.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
13.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
13.06 Identify and exhibit traits for retaining employment. ECD 7.0
13.07 Identify opportunities and research requirements for career advancement. ECD 8.0
13.08 Research the benefits of ongoing professional development. ECD 9.0
13.09 Examine and describe entrepreneurship opportunities as a career planning option.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Industrial Cooperative Education - OJT**
Course Number: **8700400**
Course Credit: **Multiple**

Course Description:

The purpose of this course is to provide the on-the-job training component in conjunction with a job preparatory program to prepare students for employment in industrial occupations. On-the-Job experiences are provided as an addition to a job preparatory program which will develop occupational competencies required for employment in the occupation chosen by the student as a career choice or to provide experiences that further develop the competencies acquired by the student in an in-school job preparatory program. This program is not intended for supplemental vocational course instruction and shall not be claimed for supplemental FTE purposes.

01.0 Demonstrate job related skills for the chosen occupation --The student will be able to:
  01.01 Demonstrate competencies from appropriate curriculum frameworks/student performance standards, as identified in the student training plan.

02.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
  02.01 Demonstrate knowledge of arithmetic operations. AF3.2
  02.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
  02.03 Construct charts/tables/graphs using functions and data. AF3.5

03.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
  03.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
  03.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

04.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
  04.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
  04.02 Locate, organize and reference written information from various sources. CM 3.0
  04.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
  04.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
  04.05 Apply active listening skills to obtain and clarify information. CM 7.0
  04.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
  04.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

05.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
  05.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4

05.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
05.03 Present information formally and informally for specific purposes and audiences. AF2.9

06.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
06.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
06.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
06.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
06.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

07.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
07.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
07.02 Explain emergency procedures to follow in response to workplace accidents.
07.03 Create a disaster and/or emergency response plan.

08.0 Use information technology tools--The students will be able to:
08.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
08.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
08.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
08.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

09.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
09.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
09.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
09.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
09.04 Interpret and explain written organizational policies and procedures. ELR 2.0

10.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
10.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
10.02 Describe the effect of money management on personal and career goals. FL 3.0
10.03 Develop a personal budget and financial goals. FL3.1
10.04 Complete financial instruments for making deposits and withdrawals. FL3.2
10.05 Maintain financial records. FL3.3
10.06 Read and reconcile financial statements. FL3.4
10.07 Research, compare and contrast investment opportunities.

11.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

11.01 Describe the nature and types of business organizations. SY 1.0
11.02 Explain the effect of key organizational systems on performance and quality.
11.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
11.04 Explain the impact of the global economy on business organizations. HE 2.0

12.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

12.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
12.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
12.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
12.04 Employ mentoring skills to inspire and teach others. LT 5.0

13.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

13.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
13.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
13.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
13.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
13.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
13.06 Identify and exhibit traits for retaining employment. ECD 7.0
13.07 Identify opportunities and research requirements for career advancement. ECD 8.0
13.08 Research the benefits of ongoing professional development. ECD 9.0
13.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Commercial Art Technology**
Program Type:	**Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8718000	I480203
CIP Number	0648.020300	0648.020300
Grade Level	9-12, 30, 31	30, 31
Standard Length	10 Credits	1500 Hours
Teacher Certification	COMM ART @7 G	COMM ART @7 G
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	43-9031 27-1029 27-1024	43-9031 27-1029 27-1024
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for employment as artists and related workers, illustrators, commercial designers (SOC 27-1024).

The course content will include the following: basic art skills; lettering skills; preparation of layouts and illustrations; preparation of camera ready paste-up; and development of specialized skills.

The course content should also include training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Commercial Art industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of one program, four Occupational Completion Points (OCP).

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The standard length of this program is 1500 hours.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	GRA0036	Desktop Publishing Assistant	450 Hours	43-9031
B	GRA0037	Design Technician	450 Hours	27-1029
C	GRA0038	Illustrator	300 Hours	27-1024
D	GRA0039	Print Media Artist	300 Hours	27-1024

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
8718010	A	Commercial Art Technology 1	1 Credit	43-9031	2
8718020		Commercial Art Technology 2	1 Credit		2
8718030		Commercial Art Technology 3	1 Credit		2
8718040	B	Commercial Art Technology 4	1 Credit	27-1029	2
8718050		Commercial Art Technology 5	1 Credit		2
8718060		Commercial Art Technology 6	1 Credit		2
8718070	C	Commercial Art Technology 7	1 Credit	27-1024	2
8718080		Commercial Art Technology 8	1 Credit		2
8718090	D	Commercial Art Technology 9	1 Credit	27-1024	2
8718091		Commercial Art Technology 10	1 Credit		2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate basic commercial art knowledge.
02.0 Demonstrate proficiency in graphic production.
03.0 Demonstrate proficiency in technical art skills.
04.0 Demonstrate proficiency in design skills.
05.0 Demonstrate proficiency in lettering skills.
06.0 Demonstrate an understanding of typography.
07.0 Demonstrate proficiency in layout and paste-up.
08.0 Demonstrate proficiency in illustration skills.
09.0 Demonstrate proficiency in applied design.
10.0 Demonstrate proficiency in graphic art computer skills.
11.0 Demonstrate proficiency in airbrush skills.
12.0 Demonstrate appropriate communication skills.
13.0 Demonstrate appropriate math skills.
14.0 Demonstrate appropriate understanding of basic science.
15.0 Demonstrate employability skills.
16.0 Demonstrate an understanding of entrepreneurship.
17.0 Demonstrate mathematics knowledge and skills.
18.0 Demonstrate science knowledge and skills.
19.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
20.0 Demonstrate language arts knowledge and skills.
21.0 Solve problems using critical thinking skills, creativity and innovation.
22.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
23.0 Use information technology tools.
24.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
25.0 Demonstrate personal money-management concepts, procedures, and strategies.
26.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
27.0 Describe the importance of professional ethics and legal responsibilities.
28.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Commercial Art Technology**
PSAV Number: **I480203**

Course Number: GRA0036
Occupational Completion Point: A
Desktop Publishing Assistant – 450 Hours – SOC Code 43-9031

01.0 Demonstrate basic commercial art knowledge -- The student will be able to:
- 01.01 Take notes, listen and comply with instructions.
- 01.02 Read instructions thoroughly.
- 01.03 Request clarification of instructions (ask questions).
- 01.04 Relay instructions to others orally and in writing.
- 01.05 Define and explain commercial art terms.
- 01.06 Document job tasks, costs and maintain records.
- 01.07 Make project presentations.
- 01.08 Interact with the employer, fellow employees and customers.

02.0 Demonstrate proficiency in graphic production -- The student will be able to:
- 02.01 Define the differences in production processes and estimate relative costs.
- 02.02 Recognize limitations for printing.
- 02.03 Identify and select different printing surfaces.
- 02.04 Identify and select appropriate printing inks.
- 02.05 Identify and select finishing processes.
- 02.06 Identify standard industry material sizes.
- 02.07 Specify types of folds.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
- 10.03 Produce finished computer projects reflecting current computer graphic art technology.
- 10.04 Operate various scanners and input devices for computer graphics.

12.0 Demonstrate appropriate communication skills -- The student will be able to:
- 12.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
- 12.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
- 12.03 Read and follow written and oral instructions.
- 12.04 Answer and ask questions coherently and concisely.
- 12.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
- 12.06 Demonstrate appropriate telephone/communication skills

13.0 Demonstrate appropriate math skills -- The student will be able to:

13.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
13.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
13.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
13.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
13.05 Demonstrate an understanding of federal, state and local taxes and their computation.

14.0 Demonstrate appropriate understanding of basic science -- The student will be able to:
14.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
14.02 Draw conclusions or make inferences from data.
14.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
14.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

15.0 Demonstrate employability skills -- The student will be able to:
15.01 Conduct a job search.
15.02 Secure information about a job.
15.03 Identify documents, which may be required when applying for a job.
15.04 Complete a job application form correctly.
15.05 Demonstrate competence in job interview techniques.
15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
15.07 Identify and adopt acceptable work habits.
15.08 Demonstrate knowledge of how to make job changes appropriately.
15.09 Demonstrate acceptable employee health habits.
15.10 Demonstrate knowledge of the "right-to-know law".

17.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
17.01 Demonstrate knowledge of arithmetic operations. AF3.2
17.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
17.03 Construct charts/tables/graphs using functions and data. AF3.5

18.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
18.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
18.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

19.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
19.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
19.02 Locate, organize and reference written information from various sources. CM 3.0
19.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0

19.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
19.05 Apply active listening skills to obtain and clarify information. CM 7.0
19.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
19.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

Course Number: GRA0037
Occupational Completion Point: B
Design Technician – 450 Hours – SOC Code 27-1029

04.0 Demonstrate proficiency in design skills -- The student will be able to:

04.01 Explain proper use and care of tools.
04.02 Apply principles and elements of design.
04.03 Apply color theory (pigment versus light).
04.04 Utilize tones, hues and values.
04.05 Sketch designs using pencil and ink.
04.06 Paint freehand or within sketched designs using mixed colors or apply colors to produce desired shades.
04.07 Apply color for impact (color psychology).
04.08 Differentiate between line halftone, duotone and four-color process.
04.09 Demonstrate balance in design.
04.10 Demonstrate designs with symmetry and asymmetry.
04.11 Develop grids for layouts of magazine pages, ads, etc.
04.12 Paint decorative freehand designs and objects.
04.13 Use palette knife or brush to mix colors.
04.14 Create designs by stripping.
04.15 Demonstrate harmony and contrast of line and shape.
04.16 Demonstrate harmony and contrast of color and tone.
04.17 Demonstrate harmony and contrast of proportion.
04.18 Demonstrate harmony and contrast of texture pattern.
04.19 Demonstrate harmony and contrast of motion.
04.20 Indicate style appropriate to desired impact.
04.21 Make a collage.

06.0 Demonstrate an understanding of typography -- The student will be able to:

06.01 Explain proper use, care and cleaning of equipment.
06.02 Identify and select typography materials.
06.03 Define typographic terms, including leading and kerning.
06.04 Identify and select typographic methods.
06.05 Demonstrate the ability to proofread and use proofreaders' marks.
06.06 Explain picas, points and conversion to inches.
06.07 Explain specification of type and copy fitting.
06.08 Identify and select typographic styles.
06.09 Define basic letter structures.
06.10 Demonstrate mixing of families of type.

07.0 Demonstrate proficiency in layout and paste-up -- The student will be able to:

07.01 Explain proper use and care of tools.
07.02 Identify parts of a layout.
07.03 Utilize Amberlith, Rubylith, screens, overlays and register marks.

07.04 Make thumbnail sketch pencil layouts.
07.05 Prepare comprehensives from pencil layouts.
07.06 Prepare camera-ready mechanicals from comprehensives.
07.07 Prepare specific forms of instruction on mechanicals for presentations and for a printer.
07.08 Crop and scale artwork ardor photos for layouts.
07.09 Demonstrate enlarging or reducing with a grid, proportion wheel and other methods.
07.10 Make a color separation with overlays.
07.11 Demonstrate various ruling techniques.
07.12 Demonstrate the uses of different adhesives.
07.13 Specify the use of halftones or special effects.
07.14 Explain layout and color trends.

09.0 Demonstrate proficiency in applied design -- The student will be able to:
09.01 Locate and identify resource materials and develop a morgue.
09.02 Design logos.
09.03 Design stationery layouts.
09.04 Design a magazine/book cover or record jacket.
09.05 Design an ad campaign that includes newspapers, magazines and billboards.
09.06 Design a greeting card.
09.07 Design a business card.
09.08 Apply advertising psychology.
09.09 Produce an industrial brochure.
09.10 Design a consumer brochure.
09.11 Construct a package design.
09.12 Produce TV story boards.
09.13 Develop a square and half-drop repeat design.
09.14 Produce computer-assisted artwork. (optional)

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
10.03 Produce finished computer projects reflecting current computer graphic art technology.
10.04 Operate various scanners and input devices for computer graphics.

20.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
20.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
20.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
20.03 Present information formally and informally for specific purposes and audiences. AF2.9

21.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
21.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
21.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0

- 21.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 21.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

22.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:

- 22.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 22.02 Explain emergency procedures to follow in response to workplace accidents.
- 22.03 Create a disaster and/or emergency response plan.

Course Number: GRA0038
Occupational Completion Point: C
Illustrator – 300 Hours – SOC Code 27-1024

03.0 Demonstrate proficiency in technical art skills -- The student will be able to:

- 03.01 Explain care and respect for all tools and equipment.
- 03.02 Make computations for centering, spacing and scaling drawings.
- 03.03 Draw on various types of drafting media.
- 03.04 Interpret information from drawings, prints and sketches.
- 03.05 Draw freehand sketches.
- 03.06 Draw auxiliary views.
- 03.07 Draw a one and two point perspective.
- 03.08 Make corrections on a drawing.
- 03.09 Draw in ink on a variety of surfaces.
- 03.10 Develop a glossary of technical terms.
- 03.11 Analyze an object to determine size and shape.
- 03.12 Draw an oblique drawing.
- 03.13 Draw an isometric drawing.
- 03.14 Read and interpret technical charts, graphs and diagrams.
- 03.15 Evaluate a drawing.
- 03.16 Make an orthographic drawing using a Computer-Assisted Drafting (CAD) system as an individual or team member.
- 03.17 Make a print on a plotter

08.0 Demonstrate proficiency in illustration skills -- The student will be able to:

- 08.01 Explain proper use and care of tools.
- 08.02 Demonstrate elementary anatomy drawing skills.
- 08.03 Illustrate using ink, pencil, washes, markers, tempera, watercolor and paints.
- 08.04 Demonstrate renderings of different textures using the above media.
- 08.05 Make illustrations using various subjects.
- 08.06 Make a montage illustration.
- 08.07 Draw a cartoon.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:

- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.

10.03 Produce finished computer projects reflecting current computer graphic art technology.
10.04 Operate various scanners and input devices for computer graphics.

11.0 Demonstrate proficiency in airbrush skills -- The student will be able to:
11.01 Explain proper use and care of tools.
11.02 Identify airbrush parts.
11.03 Perform airbrush exercises: dots, lines and graded shadings.
11.04 Select appropriate surfaces and painting materials.
11.05 Define the use of masking materials.
11.06 Airbrush a painting using masks or brushes.
11.07 Airbrush geometric shapes.
11.08 Airbrush freehand painting.
11.09 Airbrush an illustration of a product.
11.10 Retouch photos.

23.0 Use information technology tools--The students will be able to:
07.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
07.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
07.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
07.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

24.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
08.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
08.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
08.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
08.04 Interpret and explain written organizational policies and procedures. ELR 2.0

25.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
25.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
25.02 Describe the effect of money management on personal and career goals. FL 3.0
25.03 Develop a personal budget and financial goals. FL3.1
25.04 Complete financial instruments for making deposits and withdrawals. FL3.2
25.05 Maintain financial records. FL3.3
25.06 Read and reconcile financial statements. FL3.4
25.07 Research, compare and contrast investment opportunities.

Course Number: GRA0039
Occupational Completion Point: D
Print Media Artist – 300 Hours – SOC Code 27-1024

03.0 Demonstrate proficiency in technical art skills -- The student will be able to:
- 03.01 Explain care and respect for all tools and equipment.
- 03.02 Make computations for centering, spacing and scaling drawings.
- 03.03 Draw on various types of drafting media.
- 03.04 Interpret information from drawings, prints and sketches.
- 03.05 Draw freehand sketches.
- 03.06 Draw auxiliary views.
- 03.07 Draw a one and two point perspective.
- 03.08 Make corrections on a drawing.
- 03.09 Draw in ink on a variety of surfaces.
- 03.10 Develop a glossary of technical terms.
- 03.11 Analyze an object to determine size and shape.
- 03.12 Draw an oblique drawing.
- 03.13 Draw an isometric drawing.
- 03.14 Read and interpret technical charts, graphs and diagrams.
- 03.15 Evaluate a drawing.
- 03.16 Make an orthographic drawing using a Computer-Assisted Drafting (CAD) system as an individual or team member.
- 03.17 Make a print on a plotter

05.0 Demonstrate proficiency in lettering skills -- The student will be able to:
- 05.01 Demonstrate use and care of tools, lettering pens, t-squares and triangles.
- 05.02 Identify and select lettering styles.
- 05.03 Perform and use pen, brush, pencil and Leroy lettering.
- 05.04 Utilize guidelines, margins and spacing for layouts.
- 05.05 Paint or draw precise lettering for reproduction.
- 05.06 Utilize various types of prepared lettering processes.
- 05.07 Produce a sign on poster board.
- 05.08 Determine and select lettering styles for layout sketches.
- 05.09 Illuminate a certificate.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
- 10.03 Produce finished computer projects reflecting current computer graphic art technology.
- 10.04 Operate various scanners and input devices for computer graphics

16.0 Demonstrate an understanding of entrepreneurship -- The student will be able to:
- 16.01 Define entrepreneurship.
- 16.02 Describe the importance of entrepreneurship to the American economy.
- 16.03 List the advantages and disadvantages of business ownership.
- 16.04 Identify the risks involved in ownership of a business.
- 16.05 Identify the necessary personal characteristics of a successful entrepreneur.
- 16.06 Identify the business skills needed to operate a small business efficiently and effectively.

26.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

26.01 Describe the nature and types of business organizations. SY 1.0
26.02 Explain the effect of key organizational systems on performance and quality.
26.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
26.04 Explain the impact of the global economy on business organizations. HE 2.0

27.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

27.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
27.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
27.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
27.04 Employ mentoring skills to inspire and teach others. LT 5.0

28.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

28.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
28.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
28.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
28.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
28.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
28.06 Identify and exhibit traits for retaining employment. ECD 7.0
28.07 Identify opportunities and research requirements for career advancement. ECD 8.0
28.08 Research the benefits of ongoing professional development. ECD 9.0
28.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 1**
Course Number: **8718010**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in the basics of commercial of commercial art.

01.0 Demonstrate basic commercial art knowledge -- The student will be able to:
- 01.01 Take notes, listen and comply with instructions.
- 01.02 Read instructions thoroughly.
- 01.03 Request clarification of instructions (ask questions).
- 01.04 Relay instructions to others orally and in writing.
- 01.05 Define and explain commercial art terms.
- 01.06 Document job tasks, costs and maintain records.
- 01.07 Make project presentations.
- 01.08 Interact with the employer, fellow employees and customers.

13.0 Demonstrate appropriate math skills -- The student will be able to:
- 13.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
- 13.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
- 13.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 13.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 13.05 Demonstrate an understanding of federal, state and local taxes and their computation.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 2**
Course Number: **8718020**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in graphic production and basic science as it applies to commercial art.

02.0 Demonstrate proficiency in graphic production -- The student will be able to:
- 02.01 Define the differences in production processes and estimate relative costs.
- 02.02 Recognize limitations for printing.
- 02.03 Identify and select different printing surfaces.
- 02.04 Identify and select appropriate printing inks.
- 02.05 Identify and select finishing processes.
- 02.06 Identify standard industry material sizes.
- 02.07 Specify types of folds.

12.0 Demonstrate appropriate communication skills -- The student will be able to:
- 12.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
- 12.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
- 12.03 Read and follow written and oral instructions.
- 12.04 Answer and ask questions coherently and concisely.
- 12.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
- 12.06 Demonstrate appropriate telephone/communication skills.

14.0 Demonstrate appropriate understanding of basic science -- The student will be able to:
- 14.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
- 14.02 Draw conclusions or make inferences from data.
- 14.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 14.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 3**
Course Number: **8718030**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in computer applications for commercial art and employability skills.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
- 10.03 Produce finished computer projects reflecting current computer graphic art technology.
- 10.04 Operate various scanners and input devices for computer graphics.

15.0 Demonstrate employability skills -- The student will be able to:
- 15.01 Conduct a job search.
- 15.02 Secure information about a job.
- 15.03 Identify documents, which may be required when applying for a job.
- 15.04 Complete a job application form correctly.
- 15.05 Demonstrate competence in job interview techniques.
- 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
- 15.07 Identify and adopt acceptable work habits.
- 15.08 Demonstrate knowledge of how to make job changes appropriately.
- 15.09 Demonstrate acceptable employee health habits.
- 15.10 Demonstrate knowledge of the "Right-To-Know Law".

17.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 17.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 17.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 17.03 Construct charts/tables/graphs using functions and data. AF3.5

18.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 18.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 18.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

19.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 19.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0

19.02 Locate, organize and reference written information from various sources. CM 3.0
19.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 4**
Course Number: **8718040**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in design skills and typography.

04.0 Demonstrate proficiency in design skills -- The student will be able to:
- 04.01 Explain proper use and care of tools.
- 04.02 Apply principles and elements of design.
- 04.03 Apply color theory (pigment versus light).
- 04.04 Utilize tones, hues and values.
- 04.05 Sketch designs using pencil and ink.
- 04.06 Paint freehand or within sketched designs using mixed colors or apply colors to produce desired shades.
- 04.07 Apply color for impact (color psychology).
- 04.08 Differentiate between line halftone, duotone and four-color process.
- 04.09 Demonstrate balance in design.
- 04.10 Demonstrate designs with symmetry and asymmetry.
- 04.11 Develop grids for layouts of magazine pages, ads, etc.
- 04.12 Paint decorative freehand designs and objects.
- 04.13 Use palette knife or brush to mix colors.
- 04.14 Create designs by stripping.
- 04.15 Demonstrate harmony and contrast of line and shape.
- 04.16 Demonstrate harmony and contrast of color and tone.
- 04.17 Demonstrate harmony and contrast of proportion.
- 04.18 Demonstrate harmony and contrast of texture pattern.
- 04.19 Demonstrate harmony and contrast of motion.
- 04.20 Indicate style appropriate to desired impact.
- 04.21 Make a collage.

06.0 Demonstrate an understanding of typography -- The student will be able to:
- 06.01 Explain proper use, care and cleaning of equipment.
- 06.02 Identify and select typography materials.
- 06.03 Define typographic terms, including leading and kerning.
- 06.04 Identify and select typographic methods.
- 06.05 Demonstrate the ability to proofread and use proofreaders' marks.
- 06.06 Explain picas, points and conversion to inches.
- 06.07 Explain specification of type and copy fitting.
- 06.08 Identify and select typographic styles.
- 06.09 Define basic letter structures.
- 06.10 Demonstrate mixing of families of type.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 5**
Course Number: **8718050**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in layout, paste-up and applied design techniques.

07.0 Demonstrate proficiency in layout and paste-up -- The student will be able to:
- 07.01 Explain proper use and care of tools.
- 07.02 Identify parts of a layout.
- 07.03 Utilize Amberlith, Rubylith, screens, overlays and register marks.
- 07.04 Make thumbnail sketch pencil layouts.
- 07.05 Prepare comprehensives from pencil layouts.
- 07.06 Prepare camera-ready mechanicals from comprehensives.
- 07.07 Prepare specific forms of instruction on mechanicals for presentations and for a printer.
- 07.08 Crop and scale artwork ardor photos for layouts.
- 07.09 Demonstrate enlarging or reducing with a grid, proportion wheel and other methods.
- 07.10 Make a color separation with overlays.
- 07.11 Demonstrate various ruling techniques.
- 07.12 Demonstrate the uses of different adhesives.
- 07.13 Specify the use of halftones or special effects.
- 07.14 Explain layout and color trends.

09.0 Demonstrate proficiency in applied design -- The student will be able to:
- 09.01 Locate and identify resource materials and develop a morgue.
- 09.02 Design logos.
- 09.03 Design stationery layouts.
- 09.04 Design a magazine/book cover or record jacket.
- 09.05 Design an ad campaign that includes newspapers, magazines and billboards.
- 09.06 Design a greeting card.
- 09.07 Design a business card.
- 09.08 Apply advertising psychology.
- 09.09 Produce an industrial brochure.
- 09.10 Design a consumer brochure.
- 09.11 Construct a package design.
- 09.12 Produce tv story boards.
- 09.13 Develop a square and half-drop repeat design.
- 09.14 Produce computer-assisted artwork. (optional)

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 6**
Course Number: **8718060**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in computer skills and application.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
- 10.03 Produce finished computer projects reflecting current computer graphic art technology.
- 10.04 Operate various scanners and input devices for computer graphics.

20.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 20.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 20.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 20.03 Present information formally and informally for specific purposes and audiences. AF2.9

21.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 21.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 21.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 21.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 21.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

22.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
- 22.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 22.02 Explain emergency procedures to follow in response to workplace accidents.
- 22.03 Create a disaster and/or emergency response plan.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 7**
Course Number: **8718070**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in technical art skills and proficiency in illustration skills.

03.0 Demonstrate proficiency in technical art skills -- The student will be able to:
- 03.01 Explain care and respect for all tools and equipment.
- 03.02 Make computations for centering, spacing and scaling drawings.
- 03.03 Draw on various types of drafting media.
- 03.04 Interpret information from drawings, prints and sketches.
- 03.05 Draw freehand sketches.
- 03.06 Draw auxiliary views.
- 03.07 Draw a one and two point perspective.
- 03.08 Make corrections on a drawing.
- 03.09 Draw in ink on a variety of surfaces.
- 03.10 Develop a glossary of technical terms.

08.0 Demonstrate proficiency in illustration skills -- The student will be able to:
- 08.01 Explain proper use and care of tools.
- 08.02 Demonstrate elementary anatomy drawing skills.
- 08.03 Illustrate using ink, pencil, washes, markers, tempera, watercolor and paints.
- 08.04 Demonstrate renderings of different textures using the above media.
- 08.05 Make illustrations using various subjects.
- 08.06 Make a montage illustration.
- 08.07 Draw a cartoon.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 8**
Course Number: **8718080**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in graphic art computer skills and airbrush skills for the illustrator.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
- 10.03 Produce finished computer projects reflecting current computer graphic art technology.
- 10.04 Operate various scanners and input devices for computer graphics.

11.0 Demonstrate proficiency in airbrush skills -- The student will be able to:
- 11.01 Explain proper use and care of tools.
- 11.02 Identify airbrush parts.
- 11.03 Perform airbrush exercises: dots, lines and graded shadings.
- 11.04 Select appropriate surfaces and painting materials.
- 11.05 Define the use of masking materials.
- 11.06 Airbrush a painting using masks or brushes.
- 11.07 Airbrush geometric shapes.
- 11.08 Airbrush freehand painting.
- 11.09 Airbrush an illustration of a product.
- 11.10 Retouch photos.

23.0 Use information technology tools--The students will be able to:
- 23.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 23.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 23.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 23.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

24.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 24.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 24.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 24.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

24.04 Interpret and explain written organizational policies and procedures. ELR 2.0

25.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

25.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
25.02 Describe the effect of money management on personal and career goals. FL 3.0
25.03 Develop a personal budget and financial goals. FL3.1
25.04 Complete financial instruments for making deposits and withdrawals. FL3.2
25.05 Maintain financial records. FL3.3
25.06 Read and reconcile financial statements. FL3.4
25.07 Research, compare and contrast investment opportunities.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 9**
Course Number: **8718090**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in technical art skills for the print media artist.

03.0 Demonstrate proficiency in technical art skills -- The student will be able to:
- 03.01 Analyze an object to determine size and shape.
- 03.02 Draw an oblique drawing.
- 03.03 Draw an isometric drawing.
- 03.04 Read and interpret technical charts, graphs and diagrams.
- 03.05 Evaluate a drawing.
- 03.06 Make an orthographic drawing using a Computer-Assisted Drafting (CAD) system as an individual or team member.
- 03.07 Make a print on a plotter.

05.0 Demonstrate proficiency in lettering skills -- The student will be able to:
- 05.01 Demonstrate use and care of tools, lettering pens, t-squares and triangles.
- 05.02 Identify and select lettering styles.
- 05.03 Perform and use pen, brush, pencil and Leroy lettering.
- 05.04 Utilize guidelines, margins and spacing for layouts.
- 05.05 Paint or draw precise lettering for reproduction.
- 05.06 Utilize various types of prepared lettering processes.
- 05.07 Produce a sign on poster board.
- 05.08 Determine and select lettering styles for layout sketches.
- 05.09 Illuminate a certificate.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Art Technology 10**
Course Number: **8718091**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in computer skills and application for the print media artist and an overview of free enterprise.

10.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
- 10.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
- 10.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
- 10.03 Produce finished computer projects reflecting current computer graphic art technology.
- 10.04 Operate various scanners and input devices for computer graphics.

16.0 Demonstrate an understanding of entrepreneurship -- The student will be able to:
- 16.01 Define entrepreneurship.
- 16.02 Describe the importance of entrepreneurship to the American economy.
- 16.03 List the advantages and disadvantages of business ownership.
- 16.04 Identify the risks involved in ownership of a business.
- 16.05 Identify the necessary personal characteristics of a successful entrepreneur.
- 16.06 Identify the business skills needed to operate a small business efficiently and effectively.

26.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 26.01 Describe the nature and types of business organizations. SY 1.0
- 26.02 Explain the effect of key organizational systems on performance and quality.
- 26.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 26.04 Explain the impact of the global economy on business organizations. HE 2.0

27.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 27.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 27.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 27.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 27.04 Employ mentoring skills to inspire and teach others. LT 5.0

28.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 28.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 28.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0

28.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
28.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
28.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
28.06 Identify and exhibit traits for retaining employment. ECD 7.0
28.07 Identify opportunities and research requirements for career advancement. ECD 8.0
28.08 Research the benefits of ongoing professional development. ECD 9.0
28.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **3-D Animation Technology**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	**PSAV**
Program Number	8718100	I480200
CIP Number	0610030400	0610030400
Grade Level	9-12, 30, 31	30, 31
Standard Length	7 Credits	1050 Hours
Teacher Certification	BUS ED 1 @ 2 COMPU SCI 6 COMM ART @7 G TV PRO TEC @7 G TEC ELEC $7 G	BUS ED 1 @ 2 COMPU SCI 6 COMM ART @7 G TV PRO TEC @7 G TEC ELEC $7 G
CTSO	**SkillsUSA**	**SkillsUSA**
SOC Codes (all applicable)	27-1014	27-1014
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 10 Language: 10 Reading: 10

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

This program is designed to prepare students for employment as a 3-D Animation Production Assistant, Modeler, Texture Artist/Rigger, and Animator/Motion Capture Technician.

This program offers a broad foundation of knowledge and skills to prepare students for employment in digital media, new media, and multimedia positions. The content includes practical experiences in 3-D Animation design and production. Specialized skills including video editing, audio features, and animation and authoring software are used to produce a variety of multimedia productions.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following rudiments of the digital media/multimedia industry: production planning, elements of production design, storyboarding, integration of video, graphics, animation, and audio elements into new media projects/productions, and collaboration/teamwork.

Program Structure

This program is a planned sequence of instruction consisting of four Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	DIG0060	3-D Animation Production Assistant	150 Hours	27-1014
B	DIG0061	Modeler	300 Hours	27-1014
C	DIG0062	Texture Artist/Rigger	300 Hours	27-1014
D	DIG0063	Animation/Motion Capture Technician	300 Hours	27-1014

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8718110	3-D Animation Technology 1	1 Credit	27-1014	2
B	8718120	3-D Animation Technology 2	1 Credit	27-1014	2
	8718130	3-D Animation Technology 3	1 Credit		2
C	8718140	3-D Animation Technology 4	1 Credit	27-1014	2
	8718150	3-D Animation Technology 5	1 Credit	27-1014	2
D	8718160	3-D Animation Technology 6	1 Credit	27-1014	2
	8718170	3-D Animation Technology 7	1 Credit	27-1014	2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 10 Language 10 and Reading 10. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Understand the history of 3D Animation
02.0 Understand the production process
03.0 Understand intellectual property rights, copyright laws and plagiarism as it applies to creative assets.
04.0 Demonstrate proficiency in computer skills
05.0 Demonstrate knowledge of photo editing software
06.0 Demonstrate a knowledge of production writing as it relates to 3D animation
07.0 Demonstrate knowledge of art direction
08.0 Demonstrate knowledge of character development
09.0 Demonstrate knowledge of storyboarding
10.0 Demonstrate knowledge of animatics
11.0 Demonstrate knowledge of video editing software
12.0 Demonstrate appropriate voice acting skills
13.0 Demonstrate basic audio production
14.0 Demonstrate knowledge of audio editing software
15.0 Demonstrate knowledge of funding presentations and pitches
07.0 Demonstrate mathematics knowledge and skills
08.0 Demonstrate science knowledge and skills
09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas
19.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives
20.0 Explain the importance of employability and entrepreneurship skills
21.0 Understand modeling in relation to the production process
22.0 Demonstrate knowledge of animation principles as it relates to modeling
23.0 Demonstrate knowledge of modeling principles
24.0 Demonstrate knowledge of 3D Animation Software
25.0 Demonstrate knowledge of 3D Animation software navigation
26.0 Demonstrate knowledge of NURBS modeling
27.0 Demonstrate knowledge of polygon modeling
28.0 Demonstrate knowledge of basic lighting
29.0 Demonstrate knowledge of basic materials and textures
30.0 Demonstrate knowledge of basic animation
31.0 Demonstrate knowledge of basic character setup
32.0 Demonstrate knowledge of basic 3D rendering
33.0 Demonstrate language arts knowledge and skills
34.0 Solve problems using critical thinking skills, creativity and innovation

35.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance
36.0 Understand the role of texture artist in relation to the production process.
37.0 Demonstrate knowledge color theory
38.0 Demonstrate knowledge of advanced material and texture creation.
39.0 Demonstrate knowledge of Cloth and Hair.
40.0 Demonstrate knowledge of cel-shading.
41.0 Demonstrate knowledge of texture baking.
42.0 Demonstrate knowledge of texture maps.
43.0 Demonstrate knowledge of 3D paint.
44.0 Demonstrate knowledge of rigging.
45.0 Demonstrate knowledge of morphing.
46.0 Demonstrate knowledge of facial animation.
47.0 Demonstrate knowledge of advanced rigging.
48.0 Use information technology tools
49.0 Describe the importance of professional ethics and legal responsibilities
50.0 Demonstrate personal money-management concepts, procedures, and strategies
51.0 Demonstrate knowledge of motion capture systems
52.0 Demonstrate knowledge of motion capture system setup
53.0 Demonstrate knowledge of motion capture preproduction
54.0 Demonstrate knowledge of motion capture production
55.0 Demonstrate knowledge of motion capture post production
56.0 Understand the role of an 3D Animator in relation to the production process
57.0 Demonstrate knowledge of advanced animation
58.0 Demonstrate knowledge of motion graphics
59.0 Demonstrate knowledge animation behaviors and scripting
60.0 Demonstrate knowledge of particle systems -:
61.0 Demonstrate knowledge of advanced audio production
62.0 Demonstrate knowledge of dynamics (physics)
63.0 Demonstrate knowledge of distributed rendering
64.0 Demonstrate knowledge of video compositing software
65.0 Demonstrate knowledge of post production-
66.0 Develop professional portfolio of work
67.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment
68.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives:
69.0 Explain the importance of employability and entrepreneurship skills

Florida Department of Education
Student Performance Standards

Program Title: **3-D Animation Technology**
PSAV Number: **I480200**

Course Number: DIG0060
Occupational Completion Point: A
3-D Animation Production Assistant – 150 Hours – SOC Code 27-1014

01.0 Understand the history of 3D Animation --The student will be able to:
- 01.01 Understand the history of animation (2D, cell, stop motion).
- 01.02 Understand the history of computer animation.
- 01.03 Identify the advantages and limitations of computer animation.
- 01.04 Identify industry and business use of 3D animation.
- 01.05 Identify 3D assets and associated end products.

02.0 Understand the production process– The student will be able to:
- 02.01 Identify the job titles associated with animation production.
- 02.02 Identify various tools and equipment used to produce 3D animation.
- 02.03 Understand speed and efficiency concepts
- 02.04 Understand a production pipeline.
- 02.05 Identify the departments of an animation studio.
- 02.06 Understand the interrelationships between departments.
- 02.07 Understand basic communication concepts (verbal, memos, paperwork).
- 02.08 Identify the stages of production.
- 02.09 Understand studio terms and jargon.
- 02.10 Create and organize production paperwork into production bibles or prepare for presentations.

03.0 Understand intellectual property rights, copyright laws and plagiarism as it applies to creative assets. – The student will be able to:
- 03.01 Understand the limits and expectations of copyright protection.
- 03.02 Understand the use of “Fair use and Fair Dealing”.
- 03.03 Understand the transfer and licensing of creative works.
- 03.04 Understand the use of “exclusive rights” to intellectual creations.
- 03.05 Demonstrate the use of digital watermarking.

04.0 Demonstrate proficiency in computer skills--The student will be able to:
- 04.01 Identify all computer parts.
- 04.02 Demonstrate understanding of computer performance specifications.
- 04.03 Compare and contrast difference between business machines and workstations.
- 04.04 Demonstrate best practices of computer safety and ergonomics.
- 04.05 Demonstrate understanding of operating systems.
- 04.06 Perform software installation and setup.
- 04.07 Perform peripheral device installation and setup.
- 04.08 Perform computer upgrades. (memory / hard disk / cards)
- 04.09 Perform storage management operations (project / file)
- 04.10 Demonstrate knowledge of computer maintenance.
- 04.11 Demonstrate ability to troubleshoot computer hardware and software issues.

05.0 Demonstrate knowledge of photo editing software--The student will be able to:
- 05.01 Demonstrate understanding file formats and storage options.
- 05.02 Identify parts of the software interface. (menus / palettes)
- 05.03 Demonstrate ability to use each of the basic tool sets.
- 05.04 Demonstrate ability to import, export and save images.
- 05.05 Demonstrate understanding of layers and channels.
- 05.06 Demonstrate understanding of filters, effects and plug-ins.
- 05.07 Demonstrate understanding of file presets.
- 05.08 Demonstrate ability to select portions of an image for manipulation.
- 05.09 Demonstrate ability to transforms selections and images. (crop, scale)
- 05.10 Demonstrate ability to color correct images (brightness, hue, contrast)
- 05.11 Demonstrate ability to use brushes for image creation and correction.
- 05.12 Understand non-destructive and destructive operations.
- 05.13 Demonstrate the ability to import, paint and export 3D objects
- 05.14 Demonstrate the basic use of video in Photoshop

06.0 Demonstrate a knowledge of production writing as it relates to 3D animation-The student will be able to:
- 06.01 Understand the job of a scriptwriter.
- 06.02 Identify target audiences, markets, and demographics.
- 06.03 Identify the elements of a script.
- 06.04 Develop the intended message of a script.
- 06.05 Demonstrate ability to write a treatment.
- 06.06 Demonstrate ability to write a professionally formatted script.
- 06.07 Identify the genre of a story.
- 06.08 Define characters and setting for a story.
- 06.09 Demonstrate ability to breakdown a script into production elements (cast,props).

07.0 Demonstrate knowledge of art direction--The student will be able to:
- 07.01 Develop the overall visual appearance of an animation.
- 07.02 Demonstrate the ability to create moods with style.
- 07.03 Determine the geographic location and time period of the story.
- 07.04 Understand the importance of art direction as it pertains to the message.
- 07.05 Understand the use of color in art direction.
- 07.06 Document the technical aspects of the art direction for use in production.
- 07.07 Perform the various assignments in a professional manner according to industry standards.

08.0 Demonstrate knowledge of character development--The student will be able to:
- 08.01 Demonstrate and understanding of character profiles.
- 08.02 Demonstrate the ability to develop character resumes/profiles.
- 08.03 Develop a look and design of a character that reflects the art direction.
- 08.04 Understand the technical challenges/limitations of a character.

09.0 Demonstrate knowledge of storyboarding--The student will be able to:
- 09.01 Demonstrate understanding of visual storytelling and how storyboards are used during production.
- 09.02 Identify common aspect ratios and how to calculate ratios.
- 09.03 Demonstrate understanding of camera framing and camera movement.
- 09.04 Develop a visual style using the art direction.
- 09.05 Break down a script into the various camera shots and character action.

09.06 Demonstrate understanding of perspective and depth of field.
09.07 Demonstrate knowledge of lighting and color use.
09.08 Demonstrate ability to sketch a storyboard including characters.
09.09 Demonstrate ability to use storyboarding software or illustration software.

10.0 Demonstrate knowledge of animatics--The student will be able to:
10.01 Demonstrate understanding of animatics and how they are used during production.
10.02 Identify the different types of animatics.
10.03 Demonstrate understanding of shot timing.
10.04 Break down a script into the various camera shots and character action.
10.05 Understand the concept of a working print.

11.0 Demonstrate knowledge of video editing software--The student will be able to:
11.01 Demonstrate understanding file formats and storage options.
11.02 Identify parts of the software interface. (menus / palettes)
11.03 Demonstrate ability to use each of the basic tool sets.
11.04 Demonstrate ability to import, export and save video.
11.05 Demonstrate understanding of layers and compositing.
11.06 Demonstrate understanding of filters, effects and plug-ins.
11.07 Demonstrate understanding of file presets.
11.08 Demonstrate understanding of rendering process.
11.09 Demonstrate ability to transform video (crop, scale).
11.10 Demonstrate ability to color correct images (brightness, hue, contrast)
11.11 Demonstrate ability to use brushes for image creation and correction.
11.12 Understand non-destructive and destructive operations.
11.13 Demonstrate the compositing integration of rendered 3D animation with video.

12.0 Demonstrate appropriate voice acting skills--The student will be able to:
12.01 Demonstrate an understanding of how to mark a script for voice over.
12.02 Demonstrate the ability to read aloud in a professional manner.
12.03 Demonstrate the ability to receive and properly act upon direction.
12.04 Demonstrate an understanding of the use of phonemes and facial morphs for lip-sync animation.
12.05 Understand the concept of voice acting and playing a role while speaking.
12.06 Perform the various assignments in a professional manner according to industry standards.

13.0 Demonstrate basic audio production --The student will be able to:
13.01 Demonstrate to set up a recording environment.
13.02 Demonstrate understanding of digital audio recording hardware.
13.03 Demonstrate understanding of the proper use of microphones.
13.04 Demonstrate knowledge of audio codecs and media.
13.05 Understand the history of foley and sound effects production.
13.06 Demonstrate the ability to record location sounds.

14.0 Demonstrate knowledge of audio editing software--The student will be able to:
14.01 Demonstrate understanding file formats and storage options.
14.02 Identify parts of the software interface. (menus / palettes)
14.03 Demonstrate ability to use each of the basic tool sets.
14.04 Demonstrate ability to import, export and save audio.

14.05 Demonstrate understanding of multiple tracks.
14.06 Demonstrate understanding of filters, effects and plug-ins.
14.07 Demonstrate understanding of file presets.
14.08 Demonstrate understanding of audio rendering process.
14.09 Demonstrate ability to edit, cut, and delete.
14.10 Understand non-destructive and destructive operations.

15.0 Demonstrate knowledge of funding presentations and pitches-- The student will be able to:
15.01 Understand the ecosystem associated with product distribution.
15.02 Identify the job titles and roles of the distributors.
15.03 Identify potential markets, target audiences, and products.
15.04 Develop the materials needed to effectively convey the message.
15.05 Develop a script of talking points.
15.06 Effectively communicate a message or pitch.

16.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
16.01 Demonstrate knowledge of arithmetic operations. AF3.2
16.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
16.03 Construct charts/tables/graphs using functions and data. AF3.5

17.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
17.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
17.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings.

18.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
18.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
18.02 Locate, organize and reference written information from various sources. CM 3.0
18.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
18.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
18.05 Apply active listening skills to obtain and clarify information. CM 7.0
18.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
18.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

19.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
19.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
19.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
19.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
19.04 Employ mentoring skills to inspire and teach others. LT 5.0

20.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
20.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0

20.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
20.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
20.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
20.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
20.06 Identify and exhibit traits for retaining employment. ECD 7.0
20.07 Identify opportunities and research requirements for career advancement. ECD 8.0
20.08 Research the benefits of ongoing professional development. ECD 9.0
20.09 Examine and describe entrepreneurship opportunities as a career planning option.

Course Number: DIG0061
Occupational Completion Point: B
Modeler – 300 Hours – SOC Code 27-1014

21.0 Understand modeling in relation to the production process - The student will be able to:
- 21.01 Define modeling as a process.
- 21.02 Define the role of modeler.
- 21.03 Identify job titles associated with modeler.
- 21.04 Identify modeling in the production pipeline.

22.0 Demonstrate knowledge of animation principles as it relates to modeling - The student will be able to:
- 22.01 Demonstrate an understanding of the principle - squash and stretch.
- 22.02 Demonstrate an understanding of the principle - anticipation.
- 22.03 Demonstrate an understanding of the principle - staging.
- 22.04 Demonstrate an understanding of the principle - straight ahead action and pose to pose.
- 22.05 Demonstrate an understanding of the principle - follow through and overlapping action.
- 22.06 Demonstrate an understanding of the principle - slow in and slow out.
- 22.07 Demonstrate an understanding of the principle - arcs.
- 22.08 Demonstrate an understanding of the principle - secondary action.
- 22.09 Demonstrate an understanding of the principle - timing.
- 22.10 Demonstrate an understanding of the principle - exaggeration.
- 22.11 Demonstrate an understanding of the principle - solid drawing.
- 22.12 Demonstrate an understanding of the principle - appeal.

23.0 Demonstrate knowledge of modeling principles - The student will be able to:
- 23.01 Understand 3D construction theory.
- 23.02 Demonstrate understanding of primitives, parametric modeling.
- 23.03 Demonstrate an understanding of NURBS, splines, and polygonal modeling.
- 23.04 Demonstrate ability to use reference images and files while modeling.

24.0 Demonstrate knowledge of 3D Animation Software - The student will be able to:
- 24.01 Identify the computer requirements for 3D animation software.
- 24.02 Compare and contrast available 3D animation software.
- 24.03 Identify available file formats and protocols.
- 24.04 Demonstrate an understanding of naming conventions.
- 24.05 Develop a software and file back up plan.
- 24.06 Identify common icons with in the software.
- 24.07 Demonstrate use of keyboard shortcuts.

24.08 Understand the use of a three-button mouse.

25.0 Demonstrate knowledge of 3D Animation software navigation - The student will be able to:

25.01 Identify the main windows of a 3D program.
25.02 Identify common window layouts.
25.03 Identify tool icons within the software.
25.04 Understand the significance of keyboard shortcut use and efficiency.
25.05 Demonstrate use of keyboard shortcuts.
25.06 Demonstrate an understanding of the Euclidean Geometry Model (x-y-z-coordinate system).
25.07 Demonstrate an understanding of attribute managers.
25.08 Demonstrate an understanding of layers.
25.09 Navigate the modeling window using pan, rotate, and zoom controls.
25.10 Demonstrate knowledge of selection tools (lasso, loop).
25.11 View objects in wireframe, gourard shading, lines, boxes modes.
25.12 Demonstrate use of selection sets.
25.13 Undo and redo an action within the program.
25.14 Locate the help menu system.

26.0 Demonstrate knowledge of NURBS modeling - The student will be able to:

26.01 Demonstrate an understanding of points, verticies, edges, and polygons.
26.02 Demonstrate an understanding of poly-count.
26.03 Demonstrate an understanding of primitives.
26.04 Define parametric primitives.
26.05 Locate an object’s properties, attributes, and coordinates.
26.06 Demonstrate understanding of Non uniform rational b-splines (NURBS).
26.07 Demonstrate understanding of splines and generators (extrude, lathe, sweep).
26.08 Understand the use of hierarchy.
26.09 Demonstrate an understanding of Boolean objects.
26.10 Demonstrate an understanding of Null objects.
26.11 Demonstrate an understanding of scene management (hiding-unhiding).
26.12 Demonstrate an understanding of arrays.

27.0 Demonstrate knowledge of polygon modeling - The student will be able to:

27.01 Demonstrate an understanding of N-gons.
27.02 Demonstrate an understanding of subdivision.
27.03 Demonstrate basic polygon editing and manipulation.
27.04 Demonstrate knowledge of point management(location).
27.05 Demonstrate the ability to create polygonal models from points.
27.06 Demonstrate an understanding of cutting/division tools.
27.07 Demonstrate an understanding of extrudes.
27.08 Demonstrate an understanding of symmetry.
27.09 Demonstrate an understanding of hyperNURBS.
27.10 Demonstrate an understanding of basic deformers(bend, twist, melt).

28.0 Demonstrate knowledge of basic lighting - The student will be able to:

28.01 Compare and contrast real lighting with 3D lighting.
28.02 Demonstrate an understanding 3 point lighting (key, fill, back).
28.03 Demonstrate an understanding of low key and high key lighting.
28.04 Use include/exclude commands to target light on objects.

28.05 Demonstrate use of negative intensity.
28.06 Demonstrate an understanding of the hierarchy of lights.
28.07 Demonstrate an understanding of area lights.
28.08 Demonstrate an understanding of volumetric lights.
28.09 Demonstrate an understanding of radiosity/global illumination.
28.10 Demonstrate an understanding of ambient occlusion.
28.11 Demonstrate an understanding of HDRI lighting.
28.12 Demonstrate an understanding of how light settings will effect render times.

29.0 Demonstrate knowledge of basic materials and textures - The student will be able to:
29.01 Demonstrate an understanding of material and texture storage.
29.02 Apply textures to an object.
29.03 Demonstrate an understanding of procedural shaders.
29.04 Demonstrate an understanding of channels.
29.05 Adjust the transparency, luminance, and reflection of a material.
29.06 Demonstrate an understanding of displacement maps.
29.07 Demonstrate an understanding of bump maps.
29.08 Demonstrate knowledge of material projections.
29.09 Demonstrate an understanding of UV mapping.
29.10 Demonstrate an understanding of 3D painting.
29.11 Understand how light affects the look of materials.
29.12 Understand how camera angles can affect the look of materials.

30.0 Demonstrate knowledge of basic animation - The student will be able to:
30.01 Apply animation principles to object animation.
30.02 Demonstrate an understanding of animation timelines.
30.03 Demonstrate an understanding of key framing.
30.04 Demonstrate an understanding of F-curves.
30.05 Record and edit key frames.
30.06 Demonstrate an understanding in the use of controllers.
30.07 Demonstrate an understanding of ease in, ease out.
30.08 Demonstrate an understanding of camera animation.
30.09 Render low quality reference animation.

31.0 Demonstrate knowledge of basic character setup - The student will be able to:
31.01 Compare and contrast rigging approaches and styles.
31.02 Demonstrate an understanding of the rig as it relates to the model.
31.03 Demonstrate an understanding of mesh morphing(targets, driver, driven).
31.04 Demonstrate an understanding of skeletal systems.
31.05 Demonstrate an understanding of bones or joints.
31.06 Demonstrate an understanding of bone/joint hierarchies and naming conventions.
31.07 Demonstrate an understanding of controllers.
31.08 Demonstrate an understanding of IK (Inverse Kinetics) splines.
31.09 Demonstrate an understanding of IK (Inverse Kinetics) chains.
31.10 Demonstrate an understanding of skins and weights.
31.11 Demonstrate ability to create a visual selector for the rig.

32.0 Demonstrate knowledge of basic 3D rendering – The student will be able to:
32.01 Demonstrate an understanding of processor, hardware and software rendering techniques.

32.02 Determine the final render format (size, codec, quality).
32.03 Demonstrate an understanding of basic render settings.
32.04 Demonstrate an understanding of title safe, action safe, render safe.
32.05 Select the range of frames to be rendered.
32.06 Demonstrate an understanding of global illumination (radiosity) render settings.
32.07 Demonstrate an understanding of anti-aliasing.
32.08 Demonstrate an understanding of net rendering.
32.09 Demonstrate an understanding of alpha channels.
32.10 Render animation as a movie or image sequence.
32.11 Compile image sequence into a movie.
32.12 Demonstrate an understanding of benefits, purpose and workflow of multi-pass rendering.
32.13 Demonstrate an understanding of the batch render process.

33.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
33.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
33.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
33.03 Present information formally and informally for specific purposes and audiences. AF2.9

34.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
34.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
34.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
34.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
34.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

35.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
35.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
35.02 Explain emergency procedures to follow in response to workplace accidents.
35.03 Create a disaster and/or emergency response plan

Course Number: DIG0062
Occupational Completion Point: C
Texture Artist/Rigger – 300 Hours – SOC Code 27-1014

36.0 Understand the role of texture artist in relation to the production process. - The student will be able to:
36.01 Define texturing as a process.
36.02 Define the role of texture artist.
36.03 Identify job titles associated with texture artist.
36.04 Identify texture creation in the production pipeline.
36.05 Demonstrate knowledge of the difference between textures and shaders
36.06 Demonstrate an understanding of texture projection methods
36.07 Demonstrate an understanding on uv coordinates and their application to texture mapping

36.08 Demonstrate an understanding of the round-trip integration of Photoshop and a 3D host for texture development
36.09 Demonstrate an understanding of how to link texture and shader properties to object movement via either visual or scripted programming relationships

37.0 Demonstrate knowledge color theory - The student will be able to:
37.01 Demonstrate an understanding of additive and subtractive color mixtures.
37.02 Demonstrate an understanding of hue, saturation and brightness.
37.03 Demonstrate an understanding of complimentary colors and composition.
37.04 Identify warm and cool colors.
37.05 Demonstrate an understanding of the psychology of color influence.

38.0 Demonstrate knowledge of advanced material and texture creation. - The student will be able to:
38.01 Determine required materials and textures needed for a model based on production design sheets and reference images.
38.02 Determine material and texture properties to be created.
38.03 Determine appropriate style(realistic, hyper-real, simplified)
38.04 Determine appropriate color pallets to be used based on art direction.
38.05 Determine appropriate image resolution and file format for use in 3D application.
38.06 Demonstrate knowledge of material and texture creation techniques and approaches.
38.07 Define the tools and software used to create materials and textures.
38.08 Acquire raw texture images from digital stills or scans.
38.09 Create tiled textures using photo-editing software.
38.10 Demonstrate a true working understanding of the correspondent relationship between uv polys and their related polygons.

39.0 Demonstrate knowledge of Cloth and Hair. - The student will be able to:
39.01 Determine cloth or hair requirements based on production design sheets and reference images.
39.02 Define physical properties associated with cloth and hair.
39.03 Demonstrate knowledge of hair and cloth toolsets.
39.04 Determine appropriate materials to be use with the hair.
39.05 Demonstrate knowledge of hair manipulation and management.
39.06 Demonstrate knowledge of hair and cloth lighting techniques.
39.07 Demonstrate knowledge of the dynamic simulation parameters required to make cloth and hair perform to production requirements
39.08 Demonstrate knowledge of how cloth and hair interact with other objects

40.0 Demonstrate knowledge of cel-shading. - The student will be able to:
40.01 Understand the history behind cel-shading
40.02 Determine the appropriate use of cell shading techniques.
40.03 Determine cel-shading requirements needed for a model based on production design sheets and reference images.
40.04 Demonstrate knowledge of lighting techniques used with cel-shading.
40.05 Determine appropriate render settings for cel-shading.
40.06 Determine appropriate materials and shaders to be used with cel-shading.

41.0 Demonstrate knowledge of texture baking. – The student will be able to:
41.01 Describe the advantages of baking textures.

41.02 Determine the appropriate use of baking textures.
41.03 Demonstrate texture-baking procedures.
41.04 Export models with baked textures.
41.05 Determine appropriate render settings needed for baked textures.

42.0 Demonstrate knowledge of texture maps. – The student will be able to:
42.01 Define the properties of a displacement, bump, and normal maps.
42.02 Determine the appropriate texture mapping requirements for a model based on production design sheets and reference images.
42.03 Demonstrate knowledge of displacement map placement tools and techniques.
42.04 Demonstrate knowledge of bump map tools and techniques.
42.05 Demonstrate knowledge of normal map tools and techniques.

43.0 Demonstrate knowledge of 3D paint. – The student will be able to:
43.01 Identify available 3D paint programs
43.02 Demonstrate knowledge of UV mapping tools.
43.03 Demonstrate knowledge of UV unwrapping and organizational techniques.
43.04 Prepare a UV map for export for use with photo editing software.
43.05 Demonstrate knowledge of 3D painting tools within 3D software.
43.06 Apply painted image map to model.

44.0 Demonstrate knowledge of rigging. – The student will be able to:
44.01 Define rigging as a process.
44.02 Define the role of rigger.
44.03 Identify job titles associated with a rigger.
44.04 Identify rigging creation in the production pipeline.
44.05 Demonstrate knowledge of forward kinematics vs. inverse kinematics
44.06 Demonstrate an understanding of the joint weighting process
44.07 Demonstrate the proper hierarchical structure of goals and nulls to construct effective control objects.

45.0 Demonstrate knowledge of morphing. – The student will be able to:
45.01 Define morphing as it relates to animation.
45.02 Demonstrate knowledge of morphing tools.
45.03 Demonstrate knowledge of model meshes.
45.04 Define the model area to be morphed.
45.05 Create morph target points.
45.06 Demonstrate knowledge of controllers and relational morphs (driver, driven)
45.07 Demonstrate knowledge of rotational morphs.
45.08 Demonstrate knowledge of keyframe animation and morph tags.

46.0 Demonstrate knowledge of facial animation. – The student will be able to:
46.01 Demonstrate knowledge of facial modeling techniques in respect to animation.
46.02 Demonstrate knowledge of phoneme-viseme principles for lip synchronization.
46.03 Apply facial expression animation to complement lip synchronization.
46.04 Break down a script into a sound chart.
46.05 Create a set of controls for each sound and expression.

47.0 Demonstrate knowledge of advanced rigging. – The student will be able to:
47.01 Determine use for advanced rigging.
47.02 Demonstrate knowledge of advanced rigging tools.

47.03 Prepare rigged model for animation.
47.04 Demonstrate knowledge of advanced scripting as it relates to rigging.
47.05 Create complex rigs for greater precision and control.
47.06 Demonstrate knowledge of deformers (muscle).
47.07 Demonstrate knowledge of motion capture rigging.
47.08 Determine necessary joint, bone hierarchy for motion capture rigging.
47.09 Apply pre-captured motion data to a motion capture rig.

48.0 Use information technology tools--The students will be able to:

48.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
48.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
48.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
48.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

49.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

49.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
49.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
49.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
49.04 Interpret and explain written organizational policies and procedures. ELR 2.0

50.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

50.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
50.02 Describe the effect of money management on personal and career goals. FL 3.0
50.03 Develop a personal budget and financial goals. FL3.1
50.04 Complete financial instruments for making deposits and withdrawals. FL3.2
50.05 Maintain financial records. FL3.3
50.06 Read and reconcile financial statements. FL3.4
50.07 Research, compare and contrast investment opportunities.

Course Number: DIG0063
Occupational Completion Point: D
Animator/Motion Capture Technician – 300 Hours – SOC Code 27-1014

51.0 Demonstrate knowledge of motion capture systems - The student will be able to:

51.01 Demonstrate knowledge of the history of motion capture.
51.02 Demonstrate the awareness of emerging technologies in the industry.
51.03 Demonstrate understanding of motion capture for 3D production.
51.04 Define the role of a motion capture technician.
51.05 Demonstrate understanding of optical, magnetic, and mechanical systems.
51.06 Demonstrate understanding of software based or simulated motion capture systems.
51.07 Demonstrate understanding of the motion capture production pipeline.

52.0 Demonstrate knowledge of motion capture system setup – The student will be able to:

- 52.01 Determine the capture volume based on available space and cameras.
- 52.02 Demonstrate understanding of XYZ perimeters in lab orientation.
- 52.03 Demonstrate ability to properly position and calibrate capture cameras or sensors.
- 52.04 Demonstrate ability to safely connect camera/sensor cables to the capture computer station securing cables across walkways.
- 52.05 Demonstrate understanding of motion capture computer hardware requirements and software security dongles.
- 52.06 Determine hardware and software requirements for motion capture software, update computer operating system as needed and install or update motion capture software.
- 52.07 Demonstrate understanding of motion capture specific tools and instruments.
- 52.08 Demonstrate ability to create individual optical markers and arrays using optical tape and Velcro strapping.
- 52.09 Connect and verify real-time motion capture performance software video systems.
- 52.10 Verify capture area to be safe including but not limited to camera/sensor mounts, sand bags, tethers, securing cables, camera power connections and electrical power connections.
- 52.11 Complete Mocap Facility Log indicating system user, inventory, previous session review, session time in/out, and any problems or damage parts.

53.0 Demonstrate knowledge of motion capture preproduction – The student will be able to:

- 53.01 Identify the use of motion capture as it relates to a production plan.
- 53.02 Mark script and shot list for motion capture.
- 53.03 Understand the role of a motion capture talent/actor.
- 53.04 Rehearse performance with talent to be captured.
- 53.05 Identify necessary captured performance props.
- 53.06 Determine real-time video needs.

54.0 Demonstrate knowledge of motion capture production – The student will be able to:

- 54.01 Verify maker locations and connections to be used.
- 54.02 Demonstrate ability to properly fit motion capture suit for talent/actor.
- 54.03 Demonstrate ability to properly place markers on talent/actor/prop.
- 54.04 Demonstrate understanding of static system calibration and markers.
- 54.05 Demonstrate understanding of dynamic calibration or range of motion.
- 54.06 Open, create, and adjust skeletal rig within motion capture software.
- 54.07 Label markers for use in motion capture software.
- 54.08 Demonstrate understanding of real-time live motion capture.
- 54.09 Demonstrate use of naming conventions and file storage protocol as it relates to the motion capture pipeline.
- 54.10 Record session, saving after each motion capture.

55.0 Demonstrate knowledge of motion capture post production – The student will be able to:

- 55.01 Load session for post clean up.
- 55.02 Identify gaps in data collected
- 55.03 Determine appropriate cleaning method, correct for physical discrepancies including but not limited to: occlusions, marker fall off, incorrect marker numbers.
- 55.04 Prepare cleaned motion capture data for export.

55.05 Import motion capture data into 3D animation or motion package.

56.0 Understand the role of an 3D Animator in relation to the production process - The student will be able to:

56.01 Define animation as a process.
56.02 Define the role of an animator.
56.03 Identify job titles associated with an animator.
56.04 Identify animation in the production pipeline.

57.0 Demonstrate knowledge of advanced animation - The student will be able to:

57.01 Demonstrate knowledge of how nondestructive deformers affect animation.
57.02 Demonstrate knowledge of how muscle deformers integrate with a character rig.
57.03 Demonstrate knowledge of transform and animation transfers from one object (or object hierarchy) to another.

58.0 Demonstrate knowledge of motion graphics - The student will be able to:

58.01 Demonstrate knowledge of 3D animated motion graphics.
58.02 Demonstrate knowledge of motion graphics tools and techniques.
58.03 Demonstrate knowledge of integrated dynamics to simulate gravitational and collision effects.
58.04 Demonstrate the integration of standard animation techniques to drive motion graphics elements abased on node-based visual programming.
58.05 Demonstrate the applied working knowledge of motion graphics for broadcast application in TV show opens and commercials.

59.0 Demonstrate knowledge animation behaviors and scripting - The student will be able to:

59.01 Determine appropriate use of behaviors and automated animation.
59.02 Demonstrate ability to apply behavior to an object.
59.03 Demonstrate ability to apply multiple behaviors using node or visual system.
59.04 Demonstrate ability to use object-oriented programming language to create scripts.
59.05 Demonstrate understanding of scripting console and commands.

60.0 Demonstrate knowledge of particle systems - The student will be able to:

60.01 Demonstrate understanding of particle emitters.
60.02 Prepare objects to be emitted.
60.03 Determine direction of emission and coordinate.
60.04 Determine birthrate and lifetime.
60.05 Determine scale, speed, and rotation.
60.06 Demonstrate ability to use animated particles
60.07 Demonstrate ability to create smoke, fire, sparks using emitters and materials.
60.08 Apply dynamics to an emitter including wind/gravity.
60.09 Demonstrate use of keyframe animation or triggers.

61.0 Demonstrate knowledge of advanced audio production - The student will be able to:

61.01 Demonstrate ability to record final audio vocal tracks and sound effects.
61.02 Edit and export sound effects for use in video editing software.
61.03 Demonstrate the ability to place audio in 3D space using the 3D animation software.
61.04 Demonstrate the ability to control motion graphics using audio file frequency and amplitude characteristics.

62.0 Demonstrate knowledge of dynamics (physics) – The student will be able to:
- 62.01 Demonstrate a basic understanding physics principles (mass, velocity and collision)
- 62.02 Determine when to use physics instead of key frame animation.
- 62.03 Apply physics tools and commands to models in a simulation.
- 62.04 Demonstrate an understanding of rigid and soft bodies.
- 62.05 Demonstrate an understanding of forces (gravity, drag, wind).
- 62.06 Demonstrate an understanding of collision detection.

63.0 Demonstrate knowledge of distributed rendering – The student will be able to:
- 63.01 Demonstrate understanding of network-based rendering.
- 63.02 Demonstrate understanding of computer networks and protocols (DHCP,TCP IP)
- 63.03 Indentify network server and data storage options.
- 63.04 Indentify minimum system requirements for client computer nodes.
- 63.05 Install render software on server and client computers and verify connection to server using name conventions.
- 63.06 Prepare 3D project for rendering and submit through web client to the server.
- 63.07 Download completed render sequence from server.

64.0 Demonstrate knowledge of video compositing software--The student will be able to:
- 64.01 Demonstrate understanding file formats and storage options.
- 64.02 Identify parts of the software interface. (menus / palettes)
- 64.03 Demonstrate ability to use each of the basic tool sets.
- 64.04 Demonstrate ability to import file and video to be composited.
- 64.05 Demonstrate understanding of layers and compositing.
- 64.06 Demonstrate understanding of filters, effects and plug-ins.
- 64.07 Demonstrate understanding of motion paths.
- 64.08 Demonstrate understanding of lighting effects.
- 64.09 Demonstrate understanding of rendering process.
- 64.10 Demonstrate ability to mask video.
- 64.11 Demonstrate ability to color correct video (brightness, hue, contrast)
- 64.12 Demonstrate ability to use vector and color keying tools.
- 64.13 Demonstrate understanding of particle systems.
- 64.14 Demonstrate understanding of time correction.
- 64.15 Demonstrate ability to export final video to be used with video editing software.
- 64.16 Demonstrate ability to prepare the 3D scene for compositing using alpha channel setting in the 3D host as well as object buffers that will be assigned video sources in the compositing software.
- 64.17 Demonstrate ability to add camera and lighting positions and rotations for use in the compositing software.

65.0 Demonstrate knowledge of post production- The student will be able to:
- 65.01 Import composited video into the timeline.
- 65.02 Import final audio into the timeline.
- 65.03 Edit video using the animatic as a reference.
- 65.04 Export video for use in websites, DVDs and other media formats.
- 65.05 Encode and assemble DVD for distribution.

66.0 Develop professional portfolio of work - The student will be able to:
- 66.01 Identify elements of a professional portfolio and resume.

66.02 Examine and determine student work to include in a portfolio and resume.
66.03 Gather illustrations, audio, video, and work history details to include into portfolio and resume.
66.04 Understand the use of Internet websites for portfolio distribution.
66.05 Determine the format for portfolio and resume.
66.06 Produce resume for final review.

67.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
67.01 Describe the nature and types of business organizations. SY 1.0
67.02 Explain the effect of key organizational systems on performance and quality.
67.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
67.04 Explain the impact of the global economy on business organizations. HE 2.0

68.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
68.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
68.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
68.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
68.04 Employ mentoring skills to inspire and teach others. LT 5.0

69.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
69.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
69.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
69.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
69.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
69.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
69.06 Identify and exhibit traits for retaining employment. ECD 7.0
69.07 Identify opportunities and research requirements for career advancement. ECD 8.0
69.08 Research the benefits of ongoing professional development. ECD 9.0
69.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

Florida Department of Education
Student Performance Standards

Course Title: **3-D Animation Technology 1**
Course Number: **8718110**
Course Credit: **1**

Course Description:

01.0 Understand the history of 3D Animation --The student will be able to:
- 01.01 Understand the history of animation (2D, cell, stop motion).
- 01.02 Understand the history of computer animation.
- 01.03 Identify the advantages and limitations of computer animation.
- 01.04 Identify industry and business use of 3D animation.
- 01.05 Identify 3D assets and associated end products.

02.0 Understand the production process– The student will be able to:

This standard supports the following Sunshine State Standards: MA.912S.3.1
- 02.01 Identify the job titles associated with animation production.
- 02.02 Identify various tools and equipment used to produce 3D animation.
- 02.03 Understand speed and efficiency concepts
- 02.04 Understand a production pipeline.
- 02.05 Identify the departments of an animation studio.
- 02.06 Understand the interrelationships between departments.
- 02.07 Understand basic communication concepts (verbal, memos, paperwork).
- 02.08 Identify the stages of production.
- 02.09 Understand studio terms and jargon.
- 02.10 Create and organize production paperwork into production bibles or prepare for presentations.

03.0 Understand intellectual property rights, copyright laws and plagiarism as it applies to creative assets. – The student will be able to:
- 03.01 Understand the limits and expectations of copyright protection.
- 03.02 Understand the use of “Fair use and Fair Dealing”.
- 03.03 Understand the transfer and licensing of creative works.
- 03.04 Understand the use of “exclusive rights” to intellectual creations.
- 03.05 Demonstrate the use of digital watermarking.

04.0 Demonstrate proficiency in computer skills--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.D.4.1, MA.912.A.7.9, MA.912.A.10.1, MA.912.A.10.2
- 04.01 Identify all computer parts.
- 04.02 Demonstrate understanding of computer performance specifications.
- 04.03 Compare and contrast difference between business machines and workstations.
- 04.04 Demonstrate best practices of computer safety and ergonomics.
- 04.05 Demonstrate understanding of operating systems.
- 04.06 Perform software installation and setup.
- 04.07 Perform peripheral device installation and setup.
- 04.08 Perform computer upgrades. (memory / hard disk / cards)

04.09 Perform storage management operations (project / file)
04.10 Demonstrate knowledge of computer maintenance.
04.11 Demonstrate ability to troubleshoot computer hardware and software issues.

05.0 Demonstrate knowledge of photo editing software--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912. A.2.1, MA.912.A.2.2, MA.912.A.1.5 MA.912.G.2.7, MA.912.5.4, MA.912.G.6.2, MA.912.G.6.4, MA.912.G.6.5,

05.01 Demonstrate understanding file formats and storage options.
05.02 Identify parts of the software interface. (menus / palettes)
05.03 Demonstrate ability to use each of the basic tool sets.
05.04 Demonstrate ability to import, export and save images.
05.05 Demonstrate understanding of layers and channels.
05.06 Demonstrate understanding of filters, effects and plug-ins.
05.07 Demonstrate understanding of file presets.
05.08 Demonstrate ability to select portions of an image for manipulation.
05.09 Demonstrate ability to transforms selections and images. (crop, scale)
05.10 Demonstrate ability to color correct images (brightness, hue, contrast)
05.11 Demonstrate ability to use brushes for image creation and correction.
05.12 Understand non-destructive and destructive operations.
05.13 Demonstrate the ability to import, paint and export 3D objects
05.14 Demonstrate the basic use of video in Photoshop

06.0 Demonstrate a knowledge of production writing as it relates to 3D animation-The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.10.1, MA.912.A.10.2, MA.912.A.2.1, MA.912.A.2.2

06.01 Understand the job of a scriptwriter.
06.02 Identify target audiences, markets, and demographics.
06.03 Identify the elements of a script.
06.04 Develop the intended message of a script.
06.05 Demonstrate ability to write a treatment.
06.06 Demonstrate ability to write a professionally formatted script.
06.07 Identify the genre of a story.
06.08 Define characters and setting for a story.
06.09 Demonstrate ability to breakdown a script into production elements (cast,props).

07.0 Demonstrate knowledge of art direction--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.G.1.4

07.01 Develop the overall visual appearance of an animation.
07.02 Demonstrate the ability to create moods with style.
07.03 Determine the geographic location and time period of the story.
07.04 Understand the importance of art direction as it pertains to the message.
07.05 Understand the use of color in art direction.
07.06 Document the technical aspects of the art direction for use in production.
07.07 Perform the various assignments in a professional manner according to industry standards.

08.0 Demonstrate knowledge of character development--The student will be able to:

- 08.01 Demonstrate and understanding of character profiles.
- 08.02 Demonstrate the ability to develop character resumes/profiles.
- 08.03 Develop a look and design of a character that reflects the art direction.
- 08.04 Understand the technical challenges/limitations of a character.

09.0 Demonstrate knowledge of storyboarding--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.5.1, MA.912.A.5.4

- 09.01 Demonstrate understanding of visual storytelling and how storyboards are used during production.
- 09.02 Identify common aspect ratios and how to calculate ratios.
- 09.03 Demonstrate understanding of camera framing and camera movement.
- 09.04 Develop a visual style using the art direction.
- 09.05 Break down a script into the various camera shots and character action.
- 09.06 Demonstrate understanding of perspective and depth of field.
- 09.07 Demonstrate knowledge of lighting and color use.
- 09.08 Demonstrate ability to sketch a storyboard including characters.
- 09.09 Demonstrate ability to use storyboarding software or illustration software.

10.0 Demonstrate knowledge of animatics--The student will be able to:

This standard supports the following Sunshine State Standards:

- 10.01 Demonstrate understanding of animatics and how they are used during production.
- 10.02 Identify the different types of animatics.
- 10.03 Demonstrate understanding of shot timing.
- 10.04 Break down a script into the various camera shots and character action.
- 10.05 Understand the concept of a working print.

11.0 Demonstrate knowledge of video editing software--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.5.1, MA.912.A.5.4

- 11.01 Demonstrate understanding file formats and storage options.
- 11.02 Identify parts of the software interface. (menus / palettes)
- 11.03 Demonstrate ability to use each of the basic tool sets.
- 11.04 Demonstrate ability to import, export and save video.
- 11.05 Demonstrate understanding of layers and compositing.
- 11.06 Demonstrate understanding of filters, effects and plug-ins.
- 11.07 Demonstrate understanding of file presets.
- 11.08 Demonstrate understanding of rendering process.
- 11.09 Demonstrate ability to transform video (crop, scale).
- 11.10 Demonstrate ability to color correct images (brightness, hue, contrast)
- 11.11 Demonstrate ability to use brushes for image creation and correction.
- 11.12 Understand non-destructive and destructive operations.
- 11.13 Demonstrate the compositing integration of rendered 3D animation with video.

12.0 Demonstrate appropriate voice acting skills--The student will be able to:

- 12.01 Demonstrate an understanding of how to mark a script for voice over.
- 12.02 Demonstrate the ability to read aloud in a professional manner.
- 12.03 Demonstrate the ability to receive and properly act upon direction.

12.04 Demonstrate an understanding of the use of phonemes and facial morphs for lip-sync animation.
12.05 Understand the concept of voice acting and playing a role while speaking.
12.06 Perform the various assignments in a professional manner according to industry standards.

13.0 Demonstrate basic audio production --The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.8.1, MA.912.A.8.3
13.01 Demonstrate to set up a recording environment.
13.02 Demonstrate understanding of digital audio recording hardware.
13.03 Demonstrate understanding of the proper use of microphones.
13.04 Demonstrate knowledge of audio codecs and media.
13.05 Understand the history of foley and sound effects production.
13.06 Demonstrate the ability to record location sounds.

14.0 Demonstrate knowledge of audio editing software--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.8.1, MA.912.A.8.3
14.01 Demonstrate understanding file formats and storage options.
14.02 Identify parts of the software interface. (menus / palettes)
14.03 Demonstrate ability to use each of the basic tool sets.
14.04 Demonstrate ability to import, export and save audio.
14.05 Demonstrate understanding of multiple tracks.
14.06 Demonstrate understanding of filters, effects and plug-ins.
14.07 Demonstrate understanding of file presets.
14.08 Demonstrate understanding of audio rendering process.
14.09 Demonstrate ability to edit, cut, and delete.
14.10 Understand non-destructive and destructive operations.

15.0 Demonstrate knowledge of funding presentations and pitches-- The student will be able to:
15.01 Understand the ecosystem associated with product distribution.
15.02 Identify the job titles and roles of the distributors.
15.03 Identify potential markets, target audiences, and products.
15.04 Develop the materials needed to effectively convey the message.
15.05 Develop a script of talking points.
15.06 Effectively communicate a message or pitch.

16.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
16.01 Demonstrate knowledge of arithmetic operations. AF3.2
16.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
16.03 Construct charts/tables/graphs using functions and data. AF3.5

17.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
17.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
17.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings.

18.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

18.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
18.02 Locate, organize and reference written information from various sources. CM 3.0
18.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
18.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
18.05 Apply active listening skills to obtain and clarify information. CM 7.0
18.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
18.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

19.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

19.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
19.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
19.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
19.04 Employ mentoring skills to inspire and teach others. LT 5.0

20.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

20.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
20.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
20.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
20.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
20.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
20.06 Identify and exhibit traits for retaining employment. ECD 7.0
20.07 Identify opportunities and research requirements for career advancement. ECD 8.0
20.08 Research the benefits of ongoing professional development. ECD 9.0
20.09 Examine and describe entrepreneurship opportunities as a career planning option.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **3-D Animation Technology 2**
Course Number: **8718120**
Course Credit: **1**

Course Description:

21.0 Understand modeling in relation to the production process - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.S.3.1
- 21.01 Define modeling as a process.
- 21.02 Define the role of modeler.
- 21.03 Identify job titles associated with modeler.
- 21.04 Identify modeling in the production pipeline.

22.0 Demonstrate knowledge of animation principles as it relates to modeling - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.G.2.4
- 22.01 Demonstrate an understanding of the principle - squash and stretch.
- 22.02 Demonstrate an understanding of the principle - anticipation.
- 22.03 Demonstrate an understanding of the principle - staging.
- 22.04 Demonstrate an understanding of the principle - straight ahead action and pose to pose.
- 22.05 Demonstrate an understanding of the principle - follow through and overlapping action.
- 22.06 Demonstrate an understanding of the principle - slow in and slow out.
- 22.07 Demonstrate an understanding of the principle - arcs.
- 22.08 Demonstrate an understanding of the principle - secondary action.
- 22.09 Demonstrate an understanding of the principle - timing.
- 22.10 Demonstrate an understanding of the principle - exaggeration.
- 22.11 Demonstrate an understanding of the principle - solid drawing.
- 22.12 Demonstrate an understanding of the principle - appeal.

23.0 Demonstrate knowledge of modeling principles - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.G.7.1, MA.912.G.7.2, MA.912.G.7.3, MA.912.G.7.4, MA.912.G.7.5, MA.912.G.7.6, MA.912.G.7.7, MA.912.G.8.6
- 23.01 Understand 3D construction theory.
- 23.02 Demonstrate understanding of primitives, parametric modeling.
- 23.03 Demonstrate an understanding of NURBS, splines, and polygonal modeling.
- 23.04 Demonstrate ability to use reference images and files while modeling.

24.0 Demonstrate knowledge of 3D Animation Software - The student will be able to:
- 24.01 Identify the computer requirements for 3D animation software.
- 24.02 Compare and contrast available 3D animation software.
- 24.03 Identify available file formats and protocols.
- 24.04 Demonstrate an understanding of naming conventions.

24.05 Develop a software and file back up plan.
24.06 Identify common icons with in the software.
24.07 Demonstrate use of keyboard shortcuts.
24.08 Understand the use of a three-button mouse.

25.0 Demonstrate knowledge of 3D Animation software navigation - The student will be able to:

25.01 Identify the main windows of a 3D program.
25.02 Identify common window layouts.
25.03 Identify tool icons within the software.
25.04 Understand the significance of keyboard shortcut use and efficiency.
25.05 Demonstrate use of keyboard shortcuts.
25.06 Demonstrate an understanding of the Euclidean Geometry Model (x-y-z-coordinate system).
25.07 Demonstrate an understanding of attribute managers.
25.08 Demonstrate an understanding of layers.
25.09 Navigate the modeling window using pan, rotate, and zoom controls.
25.10 Demonstrate knowledge of selection tools (lasso, loop).
25.11 View objects in wireframe, gourard shading, lines, boxes modes.
25.12 Demonstrate use of selection sets.
25.13 Undo and redo an action within the program.
25.14 Locate the help menu system.

26.0 Demonstrate knowledge of NURBS modeling - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.D.10.- 10.03, MA.912.G.1.2-1.4, MA.912.G.2.1-2.3

26.01 Demonstrate an understanding of points, verticies, edges, and polygons.
26.02 Demonstrate an understanding of poly-count.
26.03 Demonstrate an understanding of primitives.
26.04 Define parametric primitives.
26.05 Locate an object’s properties, attributes, and coordinates.
26.06 Demonstrate understanding of Non uniform rational b-splines (NURBS).
26.07 Demonstrate understanding of splines and generators (extrude, lathe, sweep).
26.08 Understand the use of hierarchy.
26.09 Demonstrate an understanding of Boolean objects.
26.10 Demonstrate an understanding of Null objects.
26.11 Demonstrate an understanding of scene management (hiding-unhiding).
26.12 Demonstrate an understanding of arrays.

27.0 Demonstrate knowledge of polygon modeling - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.G.2.6, MA.912.G.4.5, MA.912.G.4.6, MA.912.G.3.3, MA.912.G.5.1, MA.912.G.5.4,

27.01 Demonstrate an understanding of N-gons.
27.02 Demonstrate an understanding of subdivision.
27.03 Demonstrate basic polygon editing and manipulation.
27.04 Demonstrate knowledge of point management(location).
27.05 Demonstrate the ability to create polygonal models from points.
27.06 Demonstrate an understanding of cutting/division tools.
27.07 Demonstrate an understanding of extrudes.

27.08 Demonstrate an understanding of symmetry.
27.09 Demonstrate an understanding of hyper NURBS.
27.10 Demonstrate an understanding of basic deformers(bend, twist, melt).

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **3-D Animation Technology 3**
Course Number: **8718130**
Course Credit: **1**

Course Description:

28.0 Demonstrate knowledge of basic lighting - The student will be able to:
- 28.01 Compare and contrast real lighting with 3D lighting.
- 28.02 Demonstrate an understanding 3 point lighting (key, fill, back).
- 28.03 Demonstrate an understanding of low key and high key lighting.
- 28.04 Use include/exclude commands to target light on objects.
- 28.05 Demonstrate use of negative intensity.
- 28.06 Demonstrate an understanding of the hierarchy of lights.
- 28.07 Demonstrate an understanding of area lights.
- 28.08 Demonstrate an understanding of volumetric lights.
- 28.09 Demonstrate an understanding of radiosity/global illumination.
- 28.10 Demonstrate an understanding of ambient occlusion.
- 28.11 Demonstrate an understanding of HDRI lighting.
- 28.12 Demonstrate an understanding of how light settings will effect render times.

29.0 Demonstrate knowledge of basic materials and textures - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.G.7.5, MA.912.G.7.6, MA.912.G.7.7, MA.912.A.9.1, MA.912.A.9.3
- 29.01 Demonstrate an understanding of material and texture storage.
- 29.02 Apply textures to an object.
- 29.03 Demonstrate an understanding of procedural shaders.
- 29.04 Demonstrate an understanding of channels.
- 29.05 Adjust the transparency, luminance, and reflection of a material.
- 29.06 Demonstrate an understanding of displacement maps.
- 29.07 Demonstrate an understanding of bump maps.
- 29.08 Demonstrate knowledge of material projections.
- 29.09 Demonstrate an understanding of UV mapping.
- 29.10 Demonstrate an understanding of 3D painting.
- 29.11 Understand how light affects the look of materials.
- 29.12 Understand how camera angles can affect the look of materials.

30.0 Demonstrate knowledge of basic animation - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.S.3.1, MA.912.S.3.2, MA.912.D.9.1, MA.912.D.9.2, MA.912.D.9.3
- 30.01 Apply animation principles to object animation.
- 30.02 Demonstrate an understanding of animation timelines.
- 30.03 Demonstrate an understanding of key framing.
- 30.04 Demonstrate an understanding of F-curves.
- 30.05 Record and edit key frames.
- 30.06 Demonstrate an understanding in the use of controllers.

30.07 Demonstrate an understanding of ease in, ease out.
30.08 Demonstrate an understanding of camera animation.
30.09 Render low quality reference animation.

31.0 Demonstrate knowledge of basic character setup - The student will be able to:
31.01 Compare and contrast rigging approaches and styles.
31.02 Demonstrate an understanding of the rig as it relates to the model.
31.03 Demonstrate an understanding of mesh morphing(targets, driver, driven).
31.04 Demonstrate an understanding of skeletal systems.
31.05 Demonstrate an understanding of bones or joints.
31.06 Demonstrate an understanding of bone/joint hierarchies and naming conventions.
31.07 Demonstrate an understanding of controllers.
31.08 Demonstrate an understanding of IK (Inverse Kinetics) splines.
31.09 Demonstrate an understanding of IK (Inverse Kinetics) chains.
31.10 Demonstrate an understanding of skins and weights.
31.11 Demonstrate ability to create a visual selector for the rig.

32.0 Demonstrate knowledge of basic 3D rendering – The student will be able to:
32.01 Demonstrate an understanding of processor, hardware and software rendering techniques.
32.02 Determine the final render format (size, codec, quality).
32.03 Demonstrate an understanding of basic render settings.
32.04 Demonstrate an understanding of title safe, action safe, render safe.
32.05 Select the range of frames to be rendered.
32.06 Demonstrate an understanding of global illumination (radiosity) render settings.
32.07 Demonstrate an understanding of anti-aliasing.
32.08 Demonstrate an understanding of net rendering.
32.09 Demonstrate an understanding of alpha channels.
32.10 Render animation as a movie or image sequence.
32.11 Compile image sequence into a movie.
32.12 Demonstrate an understanding of benefits, purpose and workflow of multi-pass rendering.
32.13 Demonstrate an understanding of the batch render process.

33.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
33.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
33.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
33.03 Present information formally and informally for specific purposes and audiences. AF2.9

34.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
34.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
34.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
34.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
34.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

35.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:

- 35.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 35.02 Explain emergency procedures to follow in response to workplace accidents.
- 35.03 Create a disaster and/or emergency response plan

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **3-D Animation Technology 4**
Course Number: **8718140**
Course Credit: **1**

Course Description:

36.0 Understand the role of texture artist in relation to the production process. - The student will be able to:
36.01 Define texturing as a process.
36.02 Define the role of texture artist.
36.03 Identify job titles associated with texture artist.
36.04 Identify texture creation in the production pipeline.
36.05 Demonstrate knowledge of the difference between textures and shaders
36.06 Demonstrate an understanding of texture projection methods
36.07 Demonstrate an understanding on uv coordinates and their application to texture mapping
36.08 Demonstrate an understanding of the round-trip integration of Photoshop and a 3D host for texture development
36.09 Demonstrate an understanding of how to link texture and shader properties to object movement via either visual or scripted programming relationships

37.0 Demonstrate knowledge color theory - The student will be able to:

This standard supports the following Sunshine State Standards MA.912.A.1.5, MA.912.A.2.1, MA.912.A.2.2, MA.912.G.2.7, MA.912.5.4, MA.912.6.2, MA.912.G.6.4, MA.912.G.6.5
37.01 Demonstrate an understanding of additive and subtractive color mixtures.
37.02 Demonstrate an understanding of hue, saturation and brightness.
37.03 Demonstrate an understanding of complimentary colors and composition.
37.04 Identify warm and cool colors.
37.05 Demonstrate an understanding of the psychology of color influence.

38.0 Demonstrate knowledge of advanced material and texture creation. - The student will be able to:
38.01 Determine required materials and textures needed for a model based on production design sheets and reference images.
38.02 Determine material and texture properties to be created.
38.03 Determine appropriate style(realistic, hyper-real, simplified)
38.04 Determine appropriate color pallets to be used based on art direction.
38.05 Determine appropriate image resolution and file format for use in 3D application.
38.06 Demonstrate knowledge of material and texture creation techniques and approaches.
38.07 Define the tools and software used to create materials and textures.
38.08 Acquire raw texture images from digital stills or scans.
38.09 Create tiled textures using photo-editing software.
38.10 Demonstrate a true working understanding of the correspondent relationship between uv polys and their related polygons.

39.0 Demonstrate knowledge of Cloth and Hair. - The student will be able to:
- 39.01 Determine cloth or hair requirements based on production design sheets and reference images.
- 39.02 Define physical properties associated with cloth and hair.
- 39.03 Demonstrate knowledge of hair and cloth toolsets.
- 39.04 Determine appropriate materials to be use with the hair.
- 39.05 Demonstrate knowledge of hair manipulation and management.
- 39.06 Demonstrate knowledge of hair and cloth lighting techniques.
- 39.07 Demonstrate knowledge of the dynamic simulation parameters required to make cloth and hair perform to production requirements
- 39.08 Demonstrate knowledge of how cloth and hair interact with other objects

40.0 Demonstrate knowledge of cel-shading. - The student will be able to:
- 40.01 Understand the history behind cel-shading
- 40.02 Determine the appropriate use of cell shading techniques.
- 40.03 Determine cel-shading requirements needed for a model based on production design sheets and reference images.
- 40.04 Demonstrate knowledge of lighting techniques used with cel-shading.
- 40.05 Determine appropriate render settings for cel-shading.
- 40.06 Determine appropriate materials and shaders to be used with cel-shading.

41.0 Demonstrate knowledge of texture baking. – The student will be able to:
- 41.01 Describe the advantages of baking textures.
- 41.02 Determine the appropriate use of baking textures.
- 41.03 Demonstrate texture-baking procedures.
- 41.04 Export models with baked textures.
- 41.05 Determine appropriate render settings needed for baked textures.

42.0 Demonstrate knowledge of texture maps. – The student will be able to:
- 42.01 Define the properties of a displacement, bump, and normal maps.
- 42.02 Determine the appropriate texture mapping requirements for a model based on production design sheets and reference images.
- 42.03 Demonstrate knowledge of displacement map placement tools and techniques.
- 42.04 Demonstrate knowledge of bump map tools and techniques.
- 42.05 Demonstrate knowledge of normal map tools and techniques.

43.0 Demonstrate knowledge of 3D paint. – The student will be able to:

This standard supports the following Sunshine State Standards MA.912.G.7.5, MA.912.G.7.6, MA.912.G.7.7,
- 43.01 Identify available 3D paint programs
- 43.02 Demonstrate knowledge of UV mapping tools.
- 43.03 Demonstrate knowledge of UV unwrapping and organizational techniques.
- 43.04 Prepare a UV map for export for use with photo editing software.
- 43.05 Demonstrate knowledge of 3D painting tools within 3D software.
- 43.06 Apply painted image map to model.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**3-D Animation Technology 5**
Course Number:	**8718150**
Course Credit:	**1**

Course Description:

44.0 Demonstrate knowledge of rigging. – The student will be able to:
  44.01 Define rigging as a process.
  44.02 Define the role of rigger.
  44.03 Identify job titles associated with a rigger.
  44.04 Identify rigging creation in the production pipeline.
  44.05 Demonstrate knowledge of forward kinematics vs. inverse kinematics
  44.06 Demonstrate an understanding of the joint weighting process
  44.07 Demonstrate the proper hierarchical structure of goals and nulls to construct effective control objects.

45.0 Demonstrate knowledge of morphing. – The student will be able to:

This standard supports the following Sunshine State Standards MA.912.G.1.4
  45.01 Define morphing as it relates to animation.
  45.02 Demonstrate knowledge of morphing tools.
  45.03 Demonstrate knowledge of model meshes.
  45.04 Define the model area to be morphed.
  45.05 Create morph target points.
  45.06 Demonstrate knowledge of controllers and relational morphs (driver, driven)
  45.07 Demonstrate knowledge of rotational morphs.
  45.08 Demonstrate knowledge of keyframe animation and morph tags.

46.0 Demonstrate knowledge of facial animation. – The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.G.1.4, MA.912.G.7.5, MA.912.G.7.6, MA.912.G.7.7
  46.01 Demonstrate knowledge of facial modeling techniques in respect to animation.
  46.02 Demonstrate knowledge of phoneme-viseme principles for lip synchronization.
  46.03 Apply facial expression animation to complement lip synchronization.
  46.04 Break down a script into a sound chart.
  46.05 Create a set of controls for each sound and expression.

47.0 Demonstrate knowledge of advanced rigging. – The student will be able to:
  47.01 Determine use for advanced rigging.
  47.02 Demonstrate knowledge of advanced rigging tools.
  47.03 Prepare rigged model for animation.
  47.04 Demonstrate knowledge of advanced scripting as it relates to rigging.
  47.05 Create complex rigs for greater precision and control.
  47.06 Demonstrate knowledge of deformers (muscle).
  47.07 Demonstrate knowledge of motion capture rigging.
  47.08 Determine necessary joint, bone hierarchy for motion capture rigging.

47.09 Apply pre-captured motion data to a motion capture rig.

48.0 Use information technology tools--The students will be able to:

48.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0

48.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0

48.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0

48.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

49.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

49.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0

49.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1

49.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

49.04 Interpret and explain written organizational policies and procedures. ELR 2.0

50.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

50.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0

50.02 Describe the effect of money management on personal and career goals. FL 3.0

50.03 Develop a personal budget and financial goals. FL3.1

50.04 Complete financial instruments for making deposits and withdrawals. FL3.2

50.05 Maintain financial records. FL3.3

50.06 Read and reconcile financial statements. FL3.4

50.07 Research, compare and contrast investment opportunities.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **3-D Animation Technology 6**
Course Number: **8718160**
Course Credit: **1**

Course Description:

51.0 Demonstrate knowledge of motion capture systems - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.1.6, MA.912.A.1.7, MA.912.A.9.1, MA.912.A.9.2, MA.912.A.9.3, MA.912.T.4.1, MA.912.T.4.2, MA.912.T.4.3, MA.912.T.4.4

51.01 Demonstrate knowledge of the history of motion capture.
51.02 Demonstrate the awareness of emerging technologies in the industry.
51.03 Demonstrate understanding of motion capture for 3D production.
51.04 Define the role of a motion capture technician.
51.05 Demonstrate understanding of optical, magnetic, and mechanical systems.
51.06 Demonstrate understanding of software based or simulated motion capture systems.
51.07 Demonstrate understanding of the motion capture production pipeline.

52.0 Demonstrate knowledge of motion capture system setup – The student will be able to:
52.01 Determine the capture volume based on available space and cameras.
52.02 Demonstrate understanding of XYZ perimeters in lab orientation.
52.03 Demonstrate ability to properly position and calibrate capture cameras or sensors.
52.04 Demonstrate ability to safely connect camera/sensor cables to the capture computer station securing cables across walkways.
52.05 Demonstrate understanding of motion capture computer hardware requirements and software security dongles.
52.06 Determine hardware and software requirements for motion capture software, update computer operating system as needed and install or update motion capture software.
52.07 Demonstrate understanding of motion capture specific tools and instruments.
52.08 Demonstrate ability to create individual optical markers and arrays using optical tape and Velcro strapping.
52.09 Connect and verify real-time motion capture performance software video systems.
52.10 Verify capture area to be safe including but not limited to camera/sensor mounts, sand bags, tethers, securing cables, camera power connections and electrical power connections.
52.11 Complete Mocap Facility Log indicating system user, inventory, previous session review, session time in/out, and any problems or damage parts.

53.0 Demonstrate knowledge of motion capture preproduction – The student will be able to:
53.01 Identify the use of motion capture as it relates to a production plan.
53.02 Mark script and shot list for motion capture.

53.03 Understand the role of a motion capture talent/actor.
53.04 Rehearse performance with talent to be captured.
53.05 Identify necessary captured performance props.
53.06 Determine real-time video needs.

54.0 Demonstrate knowledge of motion capture production – The student will be able to:

54.01 Verify maker locations and connections to be used.
54.02 Demonstrate ability to properly fit motion capture suit for talent/actor.
54.03 Demonstrate ability to properly place markers on talent/actor/prop.
54.04 Demonstrate understanding of static system calibration and markers.
54.05 Demonstrate understanding of dynamic calibration or range of motion.
54.06 Open, create, and adjust skeletal rig within motion capture software.
54.07 Label markers for use in motion capture software.
54.08 Demonstrate understanding of real-time live motion capture.
54.09 Demonstrate use of naming conventions and file storage protocol as it relates to the motion capture pipeline.
54.10 Record session, saving after each motion capture.

55.0 Demonstrate knowledge of motion capture post production – The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.T.1.6, MA.912.T.1.8, MA.912.T.3.4, MA.912.T.5.1,

55.01 Load session for post clean up.
55.02 Identify gaps in data collected
55.03 Determine appropriate cleaning method, correct for physical discrepancies including but not limited to: occlusions, marker fall off, incorrect marker numbers.
55.04 Prepare cleaned motion capture data for export.
55.05 Import motion capture data into 3D animation or motion package.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **3-D Animation Technology 7**
Course Number: **8718170**
Course Credit: **1**

Course Description:

56.0 Understand the role of an 3D Animator in relation to the production process - The student will be able to:
- 56.01 Define animation as a process.
- 56.02 Define the role of an animator.
- 56.03 Identify job titles associated with an animator.
- 56.04 Identify animation in the production pipeline.

57.0 Demonstrate knowledge of advanced animation - The student will be able to:
- 57.01 Demonstrate knowledge of how nondestructive deformers affect animation.
- 57.02 Demonstrate knowledge of how muscle deformers integrate with a character rig.
- 57.03 Demonstrate knowledge of transform and animation transfers from one object (or object hierarchy) to another.

58.0 Demonstrate knowledge of motion graphics - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.1.6, MA.912.A.1.7 MA.912.T.4.1, MA.912.T.4.2, MA.912.T.4.3, MA.912.T.4.4,

- 58.01 Demonstrate knowledge of 3D animated motion graphics.
- 58.02 Demonstrate knowledge of motion graphics tools and techniques.
- 58.03 Demonstrate knowledge of integrated dynamics to simulate gravitational and collision effects.
- 58.04 Demonstrate the integration of standard animation techniques to drive motion graphics elements abased on node-based visual programming.
- 58.05 Demonstrate the applied working knowledge of motion graphics for broadcast application in TV show opens and commercials.

59.0 Demonstrate knowledge animation behaviors and scripting - The student will be able to:
- 59.01 Determine appropriate use of behaviors and automated animation.
- 59.02 Demonstrate ability to apply behavior to an object.
- 59.03 Demonstrate ability to apply multiple behaviors using node or visual system.
- 59.04 Demonstrate ability to use object-oriented programming language to create scripts.
- 59.05 Demonstrate understanding of scripting console and commands.

60.0 Demonstrate knowledge of particle systems - The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.2.6, MA.912.G.1.4, MA.912.G.2.4 MA.912.C.3.8, MA.912.C.3.9, MA.912.C.3.10
- 60.01 Demonstrate understanding of particle emitters.
- 60.02 Prepare objects to be emitted.

60.03 Determine direction of emission and coordinate.
60.04 Determine birthrate and lifetime.
60.05 Determine scale, speed, and rotation.
60.06 Demonstrate ability to use animated particles
60.07 Demonstrate ability to create smoke, fire, sparks using emitters and materials.
60.08 Apply dynamics to an emitter including wind/gravity.
60.09 Demonstrate use of keyframe animation or triggers.

61.0 Demonstrate knowledge of advanced audio production - The student will be able to:
61.01 Demonstrate ability to record final audio vocal tracks and sound effects.
61.02 Edit and export sound effects for use in video editing software.
61.03 Demonstrate the ability to place audio in 3D space using the 3D animation software.
61.04 Demonstrate the ability to control motion graphics using audio file frequency and amplitude characteristics.

62.0 Demonstrate knowledge of dynamics (physics) – The student will be able to:

This standard supports the following Sunshine State Standards MA.912.C.3.8, MA.912.C.3.9, MA.912.C.3.10

62.01 Demonstrate a basic understanding physics principles (mass, velocity and collision)
62.02 Determine when to use physics instead of key frame animation.
62.03 Apply physics tools and commands to models in a simulation.
62.04 Demonstrate an understanding of rigid and soft bodies.
62.05 Demonstrate an understanding of forces (gravity, drag, wind).
62.06 Demonstrate an understanding of collision detection.

63.0 Demonstrate knowledge of distributed rendering – The student will be able to:
63.01 Demonstrate understanding of network-based rendering.
63.02 Demonstrate understanding of computer networks and protocols (DHCP,TCP IP)
63.03 Indentify network server and data storage options.
63.04 Indentify minimum system requirements for client computer nodes.
63.05 Install render software on server and client computers and verify connection to server using name conventions.
63.06 Prepare 3D project for rendering and submit through web client to the server.
63.07 Download completed render sequence from server.

64.0 Demonstrate knowledge of video compositing software--The student will be able to:

This standard supports the following Sunshine State Standards: MA.912.A.1.5, MA.912.A.2.1, MA.912.A.2.2, MA.912.G.2.7, MA.912.G.5.4, MA.912.G.6.2 MA.912.G.6.4, MA.912.G.6.5

64.01 Demonstrate understanding file formats and storage options.
64.02 Identify parts of the software interface. (menus / palettes)
64.03 Demonstrate ability to use each of the basic tool sets.
64.04 Demonstrate ability to import file and video to be composited.
64.05 Demonstrate understanding of layers and compositing.
64.06 Demonstrate understanding of filters, effects and plug-ins.
64.07 Demonstrate understanding of motion paths.
64.08 Demonstrate understanding of lighting effects.
64.09 Demonstrate understanding of rendering process.

64.10 Demonstrate ability to mask video.
64.11 Demonstrate ability to color correct video (brightness, hue, contrast)
64.12 Demonstrate ability to use vector and color keying tools.
64.13 Demonstrate understanding of particle systems.
64.14 Demonstrate understanding of time correction.
64.15 Demonstrate ability to export final video to be used with video editing software.
64.16 Demonstrate ability to prepare the 3D scene for compositing using alpha channel setting in the 3D host as well as object buffers that will be assigned video sources in the compositing software.
64.17 Demonstrate ability to add camera and lighting positions and rotations for use in the compositing software.

65.0 Demonstrate knowledge of post production- The student will be able to:
65.01 Import composited video into the timeline.
65.02 Import final audio into the timeline.
65.03 Edit video using the animatic as a reference.
65.04 Export video for use in websites, DVDs and other media formats.
65.05 Encode and assemble DVD for distribution.

66.0 Develop professional portfolio of work - The student will be able to:
66.01 Identify elements of a professional portfolio and resume.
66.02 Examine and determine student work to include in a portfolio and resume.
66.03 Gather illustrations, audio, video, and work history details to include into portfolio and resume.
66.04 Understand the use of Internet websites for portfolio distribution.
66.05 Determine the format for portfolio and resume.
66.06 Produce resume for final review.

67.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
67.01 Describe the nature and types of business organizations. SY 1.0
67.02 Explain the effect of key organizational systems on performance and quality.
67.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
67.04 Explain the impact of the global economy on business organizations. HE 2.0

68.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
68.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
68.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
68.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
68.04 Employ mentoring skills to inspire and teach others. LT 5.0

69.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
69.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
69.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
69.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
69.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
69.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0

69.06 Identify and exhibit traits for retaining employment. ECD 7.0
69.07 Identify opportunities and research requirements for career advancement. ECD 8.0
69.08 Research the benefits of ongoing professional development. ECD 9.0
69.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Telecommunications Technology**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	**PSAV**
Program Number	8730200	I470301
CIP Number	0647010301	0647010301
Grade Level	9-12, 30, 31	30, 31
Standard Length	4 Credits	600 Hours
Teacher Certification	ELECTRONIC @7G COMP SVC @7G ELECTRICAL @7G TELCOM 7G BUS MACH @7G	ELECTRONIC @7G COMP SVC @7G ELECTRICAL @7G TELCOM 7G BUS MACH @7G
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	49-2022	49-2022
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for employment or advanced training in a variety of occupations in the Telecommunications industry.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Telecommunications industry; technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or to remain for advanced training. A student who completes the applicable competencies at any occupational completion point may either continue with the training or become an occupational completer.

The courses content includes, but is not limited to, installation, maintenance and servicing of telecommunication systems; and diagnosis and correction of operational problems in telecommunications arising from mechanical, electrical, electronics and hardware malfunctions.

Program Structure

This program is a planned sequence of instruction consisting of three occupational completion points: (A) Telecommunications Installer, (B) Telecommunications Installation and Repair Specialist, (C) Telecommunications Technician.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3) (b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	EER0051	Telecommunications Installer	150 Hours	49-2022
B	EER0052	Telecommunications Installation and Repair Specialist	150 Hours	49-2022
C	EER0055	Telecommunications Technician	300 Hours	49-2022

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8730210	Telecommunications Technology 1	1 Credit	49-2022	2
B	8730220	Telecommunications Technology 2	1 Credit	49-2022	2
C	8730230	Telecommunications Technology 3	1 Credit	49-2022	2
	8730240	Telecommunications Technology 4	1 Credit		2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

ELECTRICAL @7G Certification has been added to the Telecommunication Technology program framework. This recognizes the crossover skills in the electrical and telecommunication industries. While many electricians have trained and acquired telecommunication skills this is not universal throughout the electrical trades. The districts are responsible to assure the required skills to teach the telecommunication technology program have been acquired by the instructor.

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3) (a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Explain and practice workplace safety.
02.0 Demonstrate basic work practices.
03.0 Explain the importance of employability and entrepreneurship skills
04.0 Demonstrate the use of safety equipment.
05.0 Inspect tools and equipment.
06.0 Inspect test equipment.
07.0 Explain industry code of conduct.
08.0 Demonstrate traffic control.
09.0 Demonstrate pole climbing.
10.0 Explain roadside safety.
11.0 Explain electrical hazards.
12.0 Perform data line safety checks
13.0 Demonstrate proficiency in making electrical connections, splices and basic field repair.
14.0 Troubleshoot and repair telecommunication system wiring.
15.0 Demonstrate proficiency in customer relations.
16.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
17.0 Demonstrate proficiency in basic DC circuits.
18.0 Demonstrate appropriate understanding of basic math.
19.0 Demonstrate proficiency in the use of tools and test equipment used in the telecommunications industry.
20.0 Demonstrate mathematics knowledge and skills.
21.0 Demonstrate science knowledge and skills
22.0 Demonstrate appropriate understanding of basic science.
23.0 Demonstrate proficiency in basic AC circuits.
24.0 Analyze technical data associated with cable validation and fault location.
25.0 Install, repair, terminate and test network cabling.
26.0 Demonstrate advanced skills in test equipment usage to locate faults.
27.0 Demonstrate language arts knowledge and skills.
28.0 Solve problems using critical thinking skills, creativity and innovation.
29.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.

30.0 Demonstrate advanced cable repair techniques.
31.0 Demonstrate usage of test equipment to validate network and telecommunication cabling systems.
32.0 Demonstrate a basic understanding of computer system architecture.
33.0 Demonstrate proficiency in peripheral equipment.
34.0 Demonstrate proficiency in electronic information exchange.
35.0 Demonstrate proficiency in site requirements and considerations.
36.0 Use tables and charts
37.0 Prepare work-site plans.
38.0 Demonstrate proficiency in twisted pair design.
39.0 Use information technology tools.
40.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
41.0 Demonstrate personal money-management concepts, procedures, and strategies.
42.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
43.0 Describe the importance of professional ethics and legal responsibilities.
44.0 Explain the importance of employability and entrepreneurship skills

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Telecommunications Technology**
PSAV Number: **I470301**

Course Number: EER0051
Occupational Completion Point: A
Telecommunications Installer – 150 Hours – SOC Code 49-2022

01.0 Explain and demonstrate workplace safety -- The student will be able to:
- 01.01 Demonstrate office safety
- 01.02 Demonstrate safety outside of the office.
- 01.03 Explain fiber optics safety.
- 01.04 Demonstrate safety for splicing.
- 01.05 Demonstrate or explain bucket truck safety. (Optional)

02.0 Demonstrate basic work practices -- The student will be able to:
- 02.01 Demonstrate good work attitudes.
- 02.02 Explain work and business ethics.
- 02.03 Explain general code of conduct.

03.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 03.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 03.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 03.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 03.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 03.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 03.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 03.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 03.08 Research the benefits of ongoing professional development. ECD 9.0
- 03.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

04.0 Demonstrate the use of safety equipment -- The student will be able to:
- 04.01 Correctly use personal safety equipment used in the telecommunications industry.
- 04.02 Explain the hazards associated with telecommunications industry.

05.0 Inspect tools and equipment -– The student will be able to:
- 05.01 Safety, inspect support equipment.
- 05.02 Safety, inspect tools.

06.0 Inspect test equipment -- The student will be able to:
- 06.01 Evaluate and inspect test equipment.

07.0 Explain industry code of conduct -- The student will be able to:
- 07.01 Explain the purpose of a code of conduct.
- 07.02 List the basic parts of his/her Industry code of conduct.

07.03 Explain how the code of conduct protects both customers and workers.
07.04 Explain the relationship between code of conduct and the laws governing privacy of telephone conversations.

08.0 Demonstrate traffic control -- The student will be able to:
08.01 Use roadside signals. (Optional)
08.02 Use signage, barricades and cones. (Optional)
08.03 Perform flagging, and hand signals (Optional)
08.04 Explain general outside safety procedures.

09.0 Demonstrate pole climbing -- The student will be able to:
09.01 Conduct pole-climbing safety inspection. (Optional)
09.02 Use pole-climbing equipment in a safe and correct manner. (Optional)
09.03 Explain the hazards of pole climbing.
09.04 Demonstrate safe and correct ladder usage.
09.05 Select correct ladder for telecommunication work.
09.06 Demonstrate ladder rigging for aerial installation.
09.07 Demonstrate pole climbing to install drops and perform splicing. (Optional)

10.0 Explain roadside safety -- The student will be able to:
10.01 Explain the hazards encountered around roadways.
10.02 Work in a safe manner around roadways. (Optional)

11.0 Explain electrical hazards -- The student will be able to:
11.01 Identify the hazards associated with work on telecommunication lines and equipment.
11.02 Test and analyze various telecommunications equipment and lines for safety hazards.

12.0 Perform data line safety checks -- The student will be able to:
12.01 Check and identify hazardous line currents and voltages.

13.0 Demonstrate proficiency in making electrical connections, splices and basic field repair -– The student will be able to:
13.01 Apply proper Occupational Safety Health Administration (OSHA) Safety Standards.
13.02 Make electrical connections.
13.03 Identify and use hand tools properly.
13.04 Identify and use power tools properly.
13.05 Demonstrate acceptable soldering techniques.
13.06 Demonstrate acceptable desoldering techniques.
13.07 Demonstrate Electrostatic Discharge (ESD) safety procedures.
13.08 Describe the construction of Printed Circuit Boards (PCB's). (Optional)
13.09 Demonstrate rework and repair techniques. (Optional)

14.0 Troubleshoot and repair telecommunication system wiring -- The student will be able to:
14.01 Test telecommunication systems and evaluate based on established criteria.
14.02 Identify range of fault conditions for telecommunication systems.
14.03 Demonstrate Telecommunication fault identification skills.
14.04 Use field documentation techniques for repair of systems.
14.05 Use test equipment and logic to locate faults.

14.06 Demonstrate proficiency in repair techniques using splices, closure assembly and punch-down terminations.
14.07 Validate repaired system to industry criteria.

15.0 Demonstrate proficiency in customer relations -- The student will be able to:
15.01 Describe and demonstrate appropriate personal hygiene and professional attire.
15.02 Describe and demonstrate effective listening techniques.
15.03 Describe and apply techniques for installing customer confidence and satisfaction.
15.04 Describe and apply techniques for keeping the customer informed
15.05 Describe and apply effective follow-up techniques.
15.06 Demonstrate discretion in interacting with customers in field and retail environments.
15.07 Demonstrate an understanding of basic conflict resolution.

16.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
16.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
16.02 Locate, organize and reference written information from various sources. CM 3.0
16.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
16.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
16.05 Apply active listening skills to obtain and clarify information. CM 7.0
16.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
16.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

17.0 Demonstrate proficiency in basic DC circuits -- The student will be able to:
17.01 Solve problems in electronics units utilizing metric prefixes.
17.02 Identify sources of electricity.
17.03 Define voltage, current, resistance, power and energy.
17.04 Apply ohm's law and power formulas.
17.05 Identify and interpret industry appropriate, color codes and symbols to identify electrical components and values.
17.06 Measure properties of a circuit using Volt-Ohm Meter (VOM) and Digital Volt-Com Meter (DVM) and oscilloscopes.
17.07 Compute conductance and compute and measure resistance of conductors and insulators.
17.08 Apply ohm's law to series circuits.
17.09 Construct and verify operation of series circuits.
17.10 Analyze and troubleshoot series circuits.
17.11 Apply ohm's law to parallel circuits.
17.12 Construct and verify the operation of parallel circuits.
17.13 Analyze and troubleshoot parallel circuits.

18.0 Demonstrate appropriate understanding of basic math -- The student will be able to:
18.01 Solve problems for volume, weight, area and circumference and perimeter measurements for rectangles, square and cylinders.
18.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, and feet and inches.

18.03 Add, subtract, multiply and divide using fractions, decimals and whole numbers.
18.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
18.05 Demonstrate an understanding of federal, state and local taxes and their computation.
18.06 Use basic algebra to solve job related problems.

19.0 Demonstrate proficiency in the use of tools and test equipment used in the telecommunications industry -- The student will be able to:
19.01 Install twisted pair cabling systems.
19.02 Terminate twisted pair cords, plugs, and outlets.
19.03 Test installed cables.
19.04 Troubleshoot cables.
19.05 Demonstrate proficiency in the current techniques and equipment used in the telecommunications industry.
19.06 Demonstrate proficiency in usage of the NEC codes.
19.07 Demonstrate proficiency in usage of the color codes and configuration.
19.08 Interpret cable substitution hierarchy.

Course Number: EER0052
Occupational Completion Point: B
Telecommunication Installation and Repair Specialist – 150 Hours – SOC 49-2022

20.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
20.01 Demonstrate knowledge of arithmetic operations. AF3.2
20.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
20.03 Construct charts/tables/graphs using functions and data. AF3.5

21.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
21.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
21.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

22.0 Demonstrate appropriate understanding of basic science -- The student will be able to:
22.01 Demonstrate an understanding of the effects of temperature extremes and moisture content in regards to electronic equipment.
22.02 Demonstrate an understanding of the impact and effects of Electrostatic Discharge (ESD), power surges, grounding, and lighting strikes.
22.03 Apply the scientific method to draw conclusions or make inferences from data.
22.04 Demonstrate deductive reasoning techniques when troubleshooting
22.05 Demonstrate an understanding of the effects of heat load and ventilation in regards to electronic equipment.
22.06 Identify safety and health related issues including exposure to work related chemicals and hazardous materials, and demonstrate the appropriate precautionary measures.
22.07 Demonstrate an understanding of environmental impact and regulations in regards to the appropriate disposal of electronic equipment.

23.0 Demonstrate proficiency in basic AC circuits -- The student will be able to:

- 23.01 Identify properties of an AC signal.
- 23.02 Identify AC sources.
- 23.03 Analyze and measure AC signals utilizing VOM, DVM.
- 23.04 Perform AC safety checks.
- 23.05 Perform AC safety checks.
- 23.06 Explain high voltage power systems and hazards.

24.0 Analyze technical data associated with cable validation and fault location -- The student will be able to:

- 24.01 Read and understand telecommunications technical data.
- 24.02 Interpret diagrams, schematics.
- 24.03 Document work.

25.0 Install repair terminate and test network cabling – The student will be able to:

- 25.01 Terminate cable using industry standard configuration termination RJ11, RJ12, RJ45, BNC, and AUI.
- 25.02 Install cabling using industry standard tools, telepole, and fish tape.
- 25.03 Punch down cables on standard wiring blocks. (66 Block, 110 Block)
- 25.04 Route cable over aerial and buried drops.

26.0 Demonstrate advanced skills in test equipment usage to locate faults -- The student will be able to:

- 26.01 Operate butt-in test sets.
- 26.02 Operate toners.
- 26.03 Operate subscriber line test set.
- 26.04 Operate cable locator test sets.

27.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0

- 27.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 27.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 27.03 Present information formally and informally for specific purposes and audiences. AF2.9

28.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:

- 28.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 28.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 28.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 28.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

29.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:

- 29.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 29.02 Explain emergency procedures to follow in response to workplace accidents.
- 29.03 Create a disaster and/or emergency response plan.

Course Number: EER0055
Occupational Completion Point: C
Telecommunication Technician – 300 Hours – SOC Code 49-2022

30.0 Demonstrate advanced cable repair techniques -- The student will be able to: (Optional)
- 30.01 Prepare buried cable for splicing.
- 30.02 Splice buried cable.
- 30.03 Make various closure devices for spliced buried cable.
- 30.04 Prepare aerial cable for splicing.
- 30.05 Splice aerial cable.
- 30.06 Make various closure devices for spliced aerial cable.

31.0 Demonstrate usage of test equipment validate network and telecommunication cabling systems -- The student will be able to:
- 31.01 Validate telephone lines using standard industry procedures.
- 31.02 Validate high-speed digital lines using industry standard procedures.
- 31.03 Validate advanced signal lines. (Fiber optics).

32.0 Demonstrate a basic understanding of computer systems architecture -- The student will be able to:
- 32.01 Identify network configurations.
- 32.02 Distinguish between faults caused by wiring verses architecture configuration.
- 32.03 Install cable connectors to match architecture.
- 32.04 Explain cable limitations due to architecture.

33.0 Demonstrate proficiency in peripheral equipment -- The student will be to:
- 33.01 Demonstrate an understanding of input/output devices.
- 33.02 Identify and define serial and parallel interface standards.
- 33.03 Troubleshoot, install and upgrade telecommunications devices and adapter cards. i.e. NIC, Modem
- 33.04 Demonstrate professional connector assembly procedures.

34.0 Demonstrate proficiency in electronic information exchange -- The student will be able to:
- 34.01 Install, connect and maintain network clients to various network operating systems.
- 34.02 Connect and configure computers for network connectivity.
- 34.03 Describe use and system maintenance of a WAN and telecommunications system.
- 34.04 Demonstrate knowledge of network protocols.
- 34.05 Demonstrate knowledge of fundamentals of an Internet system.
- 34.06 Demonstrate knowledge of telecommunications services and standards.

35.0 Demonstrate proficiency in site requirements and considerations -- The student will be able to:
- 35.01 Demonstrate knowledge of data communication test equipment.
- 35.02 Demonstrate knowledge of telecommunication wiring systems.
- 35.03 Demonstrate knowledge of cable and LAN topology.
- 35.04 Demonstrate knowledge of hubs, switches and routers.
- 35.05 Calculate and determine power requirements.
- 35.06 Calculate and determine requirements of the working environment.

35.07 Install, configure and troubleshoot LAN cable systems (twisted pair, coax, or fiber).
35.08 Configure and troubleshoot patch bay, hubs and transceivers

36.0 Use tables and charts -- The student will be able to:
36.01 Determine expected levels of resistance for wiring Configuration.
36.02 Determine changes in resistance due to temperature changes.
36.03 Determine capacitance of a given cable configuration.
36.04 Demonstrate quick test methods using Quick Test Charts.

37.0 Prepare worksite plans -- The student will be able to:
37.01 Draw site plans.
37.02 Review and evaluate and plan for site electrical considerations.
37.03 Draw cable runs (cutsheet).
37.04 Evaluate and select wiring room.

38.0 Demonstrate proficiency in twisted pair design — The student will be able to:
38.01 Select correct cable for CAT5 installations.
38.02 Ensure cable rating at patch panels conforms to industry standards.
38.03 Test installed design to meet standards using test equipment.
38.04 Maintain punch down twist length specifications.
38.05 Use industry standards for securing cables to building structures.

39.0 Use information technology tools--The students will be able to:
39.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
39.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
39.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
39.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

40.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
40.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
40.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
40.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
40.04 Employ mentoring skills to inspire and teach others. LT 5.0

41.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
41.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
41.02 Describe the effect of money management on personal and career goals. FL 3.0
41.03 Develop a personal budget and financial goals. FL3.1
41.04 Complete financial instruments for making deposits and withdrawals. FL3.2
41.05 Maintain financial records. FL3.3
41.06 Read and reconcile financial statements. FL3.4
41.07 Research, compare and contrast investment opportunities.

42.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

42.01 Describe the nature and types of business organizations. SY 1.0
42.02 Explain the effect of key organizational systems on performance and quality.
42.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
42.04 Explain the impact of the global economy on business organizations. HE 2.0

43.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

43.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
43.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
43.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
43.04 Interpret and explain written organizational policies and procedures. ELR 2.0

44.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

44.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
44.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
44.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
44.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
44.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
44.06 Identify and exhibit traits for retaining employment. ECD 7.0
44.07 Identify opportunities and research requirements for career advancement. ECD 8.0
44.08 Research the benefits of ongoing professional development. ECD 9.0
44.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Telecommunication Technology 1**
Course Number: **8730210**
Course Credit: **1**

Course Description:

01.0 Explain and demonstrate workplace safety -- The student will be able to:

01.01 Demonstrate office safety
01.02 Demonstrate safety outside of the office.
01.03 Explain fiber optics safety.
01.04 Demonstrate safety for splicing.
01.05 Demonstrate or explain bucket truck safety. (Optional)

02.0 Demonstrate basic work practices -- The student will be able to:

02.01 Demonstrate good work attitudes.
02.02 Explain work and business ethics.
02.03 Explain general code of conduct.

03.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
03.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
03.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
03.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
03.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
03.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
03.06 Identify and exhibit traits for retaining employment. ECD 7.0
03.07 Identify opportunities and research requirements for career advancement. ECD 8.0
03.08 Research the benefits of ongoing professional development. ECD 9.0
03.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

04.0 Demonstrate the use of safety equipment -- The student will be able to:
04.01 Correctly use personal safety equipment used in the telecommunications industry.
04.02 Explain the hazards associated with telecommunications industry.

05.0 Inspect tools and equipment -- The student will be able to:
05.01 Safety, inspect support equipment.
05.02 Safety, inspect tools.

06.0 Inspect test equipment -- The student will be able to:
06.01 Evaluate and inspect test equipment.

07.0 Explain industry code of conduct -- The student will be able to:
07.01 Explain the purpose of a code of conduct.

07.02 List the basic parts of his/her Industry code of conduct.
07.03 Explain how the code of conduct protects both customers and workers.
07.04 Explain the relationship between code of conduct and the laws governing privacy of telephone conversations.

08.0 Demonstrate traffic control -- The student will be able to:
08.01 Use roadside signals. (Optional)
08.02 Use signage, barricades and cones. (Optional)
08.03 Perform flagging, and hand signals (Optional)
08.04 Explain general outside safety procedures.

09.0 Demonstrate pole climbing -- The student will be able to:
09.01 Conduct pole-climbing safety inspection. (Optional)
09.02 Use pole-climbing equipment in a safe and correct manner. (Optional)
09.03 Explain the hazards of pole climbing.
09.04 Demonstrate safe and correct ladder usage.
09.05 Select correct ladder for telecommunication work.
09.06 Demonstrate ladder rigging for aerial installation.
09.07 Demonstrate pole climbing to install drops and perform splicing. (Optional)

10.0 Explain roadside safety--The student will be able to:
10.01 Explain the hazards encountered around roadways.
10.02 Work in a safe manner around roadways. (Optional)

11.0 Explain electrical hazards -- The student will be able to:
11.01 Identify the hazards associated with work on telecommunication lines and equipment.
11.02 Test and analyze various telecommunications equipment and lines for safety hazards.

12.0 Perform data line safety checks -- The student will be able to:
12.01 Check and identify hazardous line currents and voltages.

13.0 Demonstrate proficiency in making electrical connections, splices and basic field repair - – The student will be able to:
13.01 Apply proper Occupational Safety Health Administration (OSHA) Safety Standards.
13.02 Make electrical connections.
13.03 Identify and use hand tools properly.
13.04 Identify and use power tools properly.
13.05 Demonstrate acceptable soldering techniques.
13.06 Demonstrate acceptable desoldering techniques.
13.07 Demonstrate Electrostatic Discharge (ESD) safety procedures.
13.08 Describe the construction of Printed Circuit Boards (PCB's). (Optional)
13.09 Demonstrate rework and repair techniques. (Optional)

14.0 Troubleshoot and repair telecommunication system wiring -- The student will be able to:
14.01 Test telecommunication systems and evaluate based on established criteria.
14.02 Identify range of fault conditions for telecommunication systems.
14.03 Demonstrate Telecommunication fault identification skills.
14.04 Use field documentation techniques for repair of systems.

14.05 Use test equipment and logic to locate faults.
14.06 Demonstrate proficiency in repair techniques using splices, closure assembly and punch-down terminations.
14.07 Validate repaired system to industry criteria.

15.0 Demonstrate proficiency in customer relations -- The student will be able to:
15.01 Describe and demonstrate appropriate personal hygiene and professional attire.
15.02 Describe and demonstrate effective listening techniques.
15.03 Describe and apply techniques for installing customer confidence and satisfaction.
15.04 Describe and apply techniques for keeping the customer informed
15.05 Describe and apply effective follow-up techniques.
15.06 Demonstrate discretion in interacting with customers in field and retail environments.
15.07 Demonstrate an understanding of basic conflict resolution.

16.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
16.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
16.02 Locate, organize and reference written information from various sources. CM 3.0
16.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
16.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
16.05 Apply active listening skills to obtain and clarify information. CM 7.0
16.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
16.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

17.0 Demonstrate proficiency in basic DC circuits -- The student will be able to:
17.01 Solve problems in electronics units utilizing metric prefixes.
17.02 Identify sources of electricity.
17.03 Define voltage, current, resistance, power and energy.
17.04 Apply ohm's law and power formulas.
17.05 Identify and interpret industry appropriate, color codes and symbols to identify electrical components and values.
17.06 Measure properties of a circuit using Volt-Ohm Meter (VOM) and Digital Volt-Com Meter (DVM) and oscilloscopes.
17.07 Compute conductance and compute and measure resistance of conductors and insulators.
17.08 Apply ohm's law to series circuits.
17.09 Construct and verify operation of series circuits.
17.10 Analyze and troubleshoot series circuits.
17.11 Apply ohm's law to parallel circuits.
17.12 Construct and verify the operation of parallel circuits.
17.13 Analyze and troubleshoot parallel circuits.

18.0 Demonstrate appropriate understanding of basic math -- The student will be able to:
18.01 Solve problems for volume, weight, area and circumference and perimeter measurements for rectangles, square and cylinders.

18.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, and feet and inches.
18.03 Add, subtract, multiply and divide using fractions, decimals and whole numbers.
18.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
18.05 Demonstrate an understanding of federal, state and local taxes and their computation.
18.06 Use basic algebra to solve job related problems.

19.0 Demonstrate proficiency in the use of tools and test equipment used in the telecommunications industry -- The student will be able to:
19.01 Install twisted pair cabling systems.
19.02 Terminate twisted pair cords, plugs, and outlets.
19.03 Test installed cables.
19.04 Troubleshoot cables.
19.05 Demonstrate proficiency in the current techniques and equipment used in the telecommunications industry.
19.06 Demonstrate proficiency in usage of the NEC codes.
19.07 Demonstrate proficiency in usage of the color codes and configuration.
19.08 Interpret cable substitution hierarchy.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Telecommunication Technology 2**
Course Number: **8730220**
Course Credit: **1**

Course Description:

20.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 20.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 20.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 20.03 Construct charts/tables/graphs using functions and data. AF3.5

21.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 21.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 21.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

22.0 Demonstrate appropriate understanding of basic science -- The student will be able to:
- 22.01 Demonstrate an understanding of the effects of temperature extremes and moisture content in regards to electronic equipment.
- 22.02 Demonstrate an understanding of the impact and effects of Electrostatic Discharge (ESD), power surges, grounding, and lighting strikes.
- 22.03 Apply the scientific method to draw conclusions or make inferences from data.
- 22.04 Demonstrate deductive reasoning techniques when troubleshooting
- 22.05 Demonstrate an understanding of the effects of heat load and ventilation in regards to electronic equipment.
- 22.06 Identify safety and health related issues including exposure to work related chemicals and hazardous materials, and demonstrate the appropriate precautionary measures.
- 22.07 Demonstrate an understanding of environmental impact and regulations in regards to the appropriate disposal of electronic equipment.

23.0 Demonstrate proficiency in basic AC circuits -- The student will be able to:
- 23.01 Identify properties of an AC signal.
- 23.02 Identify AC sources.
- 23.03 Analyze and measure AC signals utilizing VOM, DVM.
- 23.04 Perform AC safety checks.
- 23.05 Perform AC safety checks.
- 23.06 Explain high voltage power systems and hazards.

24.0 Analyze technical data associated with cable validation and fault location -- The student will be able to:
- 24.01 Read and understand telecommunications technical data.
- 24.02 Interpret diagrams, schematics.
- 24.03 Document work.

25.0 Install repair terminate and test network cabling – The student will be able to:
- 25.01 Terminate cable using industry standard configuration termination RJ11, RJ12, RJ45, BNC, and AUI.
- 25.02 Install cabling using industry standard tools, telepole, and fish tape.
- 25.03 Punch down cables on standard wiring blocks. (66 Block, 110 Block)
- 25.04 Route cable over aerial and buried drops.

26.0 Demonstrate advanced skills in test equipment usage to locate faults -- The student will be able to:
- 26.01 Operate butt-in test sets.
- 26.02 Operate toners.
- 26.03 Operate subscriber line test set.
- 26.04 Operate cable locator test sets.

27.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 27.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 27.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 27.03 Present information formally and informally for specific purposes and audiences. AF2.9

28.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 28.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 28.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 28.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 28.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

29.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
- 29.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 29.02 Explain emergency procedures to follow in response to workplace accidents.
- 29.03 Create a disaster and/or emergency response plan.

Florida Department of Education
Student Performance Standards

Course Title: **Telecommunication Technology 3-4**
Course Number: **8730230-8730240**
Course Credit: **2**

Course Description:

30.0 Demonstrate advanced cable repair techniques -- The student will be able to: (Optional)
- 30.01 Prepare buried cable for splicing.
- 30.02 Splice buried cable.
- 30.03 Make various closure devices for spliced buried cable.
- 30.04 Prepare aerial cable for splicing.
- 30.05 Splice aerial cable.
- 30.06 Make various closure devices for spliced aerial cable.

31.0 Demonstrate usage of test equipment validate network and telecommunication cabling systems -- The student will be able to:
- 31.01 Validate telephone lines using standard industry procedures.
- 31.02 Validate high-speed digital lines using industry standard procedures.
- 31.03 Validate advanced signal lines. (Fiber optics).

32.0 Demonstrate a basic understanding of computer systems architecture -- The student will be able to:
- 32.01 Identify network configurations.
- 32.02 Distinguish between faults caused by wiring verses architecture configuration.
- 32.03 Install cable connectors to match architecture.
- 32.04 Explain cable limitations due to architecture.

33.0 Demonstrate proficiency in peripheral equipment -- The student will be to:
- 33.01 Demonstrate an understanding of input/output devices.
- 33.02 Identify and define serial and parallel interface standards.
- 33.03 Troubleshoot, install and upgrade telecommunications devices and adapter cards. i.e. NIC, Modem
- 33.04 Demonstrate professional connector assembly procedures.

34.0 Demonstrate proficiency in electronic information exchange -- The student will be able to:
- 34.01 Install, connect and maintain network clients to various network operating systems.
- 34.02 Connect and configure computers for network connectivity.
- 34.03 Describe use and system maintenance of a WAN and telecommunications system.
- 34.04 Demonstrate knowledge of network protocols.
- 34.05 Demonstrate knowledge of fundamentals of an Internet system.
- 34.06 Demonstrate knowledge of telecommunications services and standards.

35.0 Demonstrate proficiency in site requirements and considerations -- The student will be able to:

35.01 Demonstrate knowledge of data communication test equipment.
35.02 Demonstrate knowledge of telecommunication wiring systems.
35.03 Demonstrate knowledge of cable and LAN topology.
35.04 Demonstrate knowledge of hubs, switches and routers.
35.05 Calculate and determine power requirements.
35.06 Calculate and determine requirements of the working environment.
35.07 Install, configure and troubleshoot LAN cable systems (twisted pair, coax, or fiber).
35.08 Configure and troubleshoot patch bay, hubs and transceivers

36.0 Use tables and charts -- The student will be able to:
36.01 Determine expected levels of resistance for wiring Configuration.
36.02 Determine changes in resistance due to temperature changes.
36.03 Determine capacitance of a given cable configuration.
36.04 Demonstrate quick test methods using Quick Test Charts.

37.0 Prepare worksite plans -- The student will be able to:
37.01 Draw site plans.
37.02 Review and evaluate and plan for site electrical considerations.
37.03 Draw cable runs (cutsheet).
37.04 Evaluate and select wiring room.

38.0 Demonstrate proficiency in twisted pair design — The student will be able to:
38.01 Select correct cable for CAT5 installations.
38.02 Ensure cable rating at patch panels conforms to industry standards.
38.03 Test installed design to meet standards using test equipment.
38.04 Maintain punch down twist length specifications.
38.05 Use industry standards for securing cables to building structures.

39.0 Use information technology tools--The students will be able to:
39.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
39.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
39.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
39.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

40.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
40.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
40.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
40.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
40.04 Employ mentoring skills to inspire and teach others. LT 5.0
40.04.1.1.1.1.1.1.1 ECD 10.0

41.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
41.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0

41.02 Describe the effect of money management on personal and career goals. FL 3.0
41.03 Develop a personal budget and financial goals. FL3.1
41.04 Complete financial instruments for making deposits and withdrawals. FL3.2
41.05 Maintain financial records. FL3.3
41.06 Read and reconcile financial statements. FL3.4
41.07 Research, compare and contrast investment opportunities.

42.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
42.01 Describe the nature and types of business organizations. SY 1.0
42.02 Explain the effect of key organizational systems on performance and quality.
42.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
42.04 Explain the impact of the global economy on business organizations. HE 2.0

43.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
43.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
43.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
43.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
43.04 Interpret and explain written organizational policies and procedures. ELR 2.0

44.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
44.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
44.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
44.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
44.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
44.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
44.06 Identify and exhibit traits for retaining employment. ECD 7.0
44.07 Identify opportunities and research requirements for career advancement. ECD 8.0
44.08 Research the benefits of ongoing professional development. ECD 9.0
44.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Printing and Graphic Communications**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8739000	I480201
CIP Number	0648.020100	0648.020100
Grade Level	9-12, 30, 31	30, 31
Standard Length	12 Credits	1800 Hours
Teacher Certification	PRINTING @7 G	PRINTING @7 G
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	51-5011 51-5021 51-5022 51-5023	51-5011 51-5021 51-5022 51-5023
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for initial employment in the Printing and Graphics Communications Industry.

The course content will include but is not limited to the following: Administrative support operations, pre-press/imaging operations, press operations and finishing operations. The course content should also include training in communication leadership, human relations' employability skills; and safe, efficient work practices.

This program also prepares individuals to set up, operate and maintain preparation, printing, binding and finishing equipment used in the printing and Graphic Communications Industry. Graduates of this program will also be prepared for further specialized training and education in Graphic Arts Technology and other related technologies.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Printing and Graphic Communications Industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of one program, five Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	GRA0012	Copy Center Technician	450 Hours	51-5021
B	GRA0013	Process Camera Operator	300 Hours	51-5022
C	GRA0014	Layout Designer/Planner	450 Hours	51-5022
D	GRA0015	Duplicator Operator	450 Hours	51-5023
E	GRA0016	General Bindery Worker	150 Hours	51-5011

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8739010	Printing & Graphic Communications 1	1 Credit	51-5021	2
	8739020	Printing & Graphic Communications 2	1 Credit		2
	8739030	Printing & Graphic Communications 3	1 Credit		2
B	8739040	Printing & Graphic Communications 4	1 Credit	51-5022	3
	8739050	Printing & Graphic Communications 5	1 Credit		3
C	8739060	Printing & Graphic Communications 6	1 Credit	51-5022	3
	8739070	Printing & Graphic Communications 7	1 Credit		3
	8739080	Printing & Graphic Communications 8	1 Credit		3

OCP	Course Number	Course Title	Length	SOC Code	Level
D	8739090 8739091 8739092	Printing & Graphic Communications 9 Printing & Graphic Communications 10 Printing & Graphic Communications 11	1 Credit 1 Credit 1 Credit	51-5023	3 3 3
E	8739093	Printing & Graphic Communications 12	1 Credit	51-5011	3

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

The PSAV component of this program (I480201) has a statewide articulation agreement approved by the Articulation Coordinating Committee:

Graphics Technology (0648.020100) – 6 Credits

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida’s Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate an understanding of safety and first aid practices.
02.0 Demonstrate an understanding of graphic communications and processes.
03.0 Demonstrate proficiency in art and copy preparation.
04.0 Demonstrate proficiency in pre/press imaging operations.
05.0 Demonstrate proficiency in reproduction photography.
06.0 Demonstrate proficiency in image assembly/plate making.
07.0 Demonstrate proficiency in performing basic offset press operation.
08.0 Demonstrate proficiency in basic finishing/binding operations.
09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
10.0 Demonstrate appropriate math skills.
11.0 Demonstrate mathematics knowledge and skills.
12.0 Demonstrate science knowledge and skills.
13.0 Explain the importance of employability and entrepreneurship skills.
14.0 Demonstrate proficiency in performing basic film assembly and plate making competencies.
15.0 Demonstrate language arts knowledge and skills.
16.0 Solve problems using critical thinking skills, creativity and innovation.
17.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
18.0 Demonstrate proficiency in basic electronic imaging competencies.
19.0 Demonstrate proficiency in the use of type and typography.
20.0 Demonstrate proficiency in using page layout operations.
21.0 Demonstrate proficiency in scanning operations.
22.0 Demonstrate an understanding of a vector base graphics program.
23.0 Demonstrate proficiency in electronic pre-press operations.
24.0 Use information technology tools.
25.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
26.0 Demonstrate proficiency in operation of basic offset press.
27.0 Demonstrate proficiency in performing basic finishing and distribution competencies.
28.0 Demonstrate personal money-management concepts, procedures, and strategies.
29.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
30.0 Describe the importance of professional ethics and legal responsibilities.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Printing and Graphic Communications
PSAV Number: I480201

Course Number: GRA0012
Occupational Completion Point: A
Copy Center Technician – 450 Hours – SOC Code 51-5021

01.0 Demonstrate understanding of safety and first aid practices -- The student will be able to:
- 01.01 Identify location(s) of fire safety equipment.
- 01.02 Describe proper use of fire safety equipment.
- 01.03 List safety rules involving flammable liquids.
- 01.04 List the steps to be taken in case of injury in the lab.
- 01.05 Identify location(s) of first aid kit(s) and eye wash station(s).
- 01.06 Discuss the importance of the Material Safety Data Sheets (MSDS).
- 01.07 Identify protective safety equipment where needed (gloves, goggles, ear plugs, etc.).
- 01.08 Practice proper safety procedures when operating equipment.
- 01.09 Practice approved shop dress code for safe operation including necessary personal safety equipment.
- 01.10 Pass a general lab safety test.
- 01.11 Demonstrate acceptable employee health habits.
- 01.12 Demonstrate knowledge of the “Right-to-Know Law”.
- 01.13 Pass a safety test in an individual’s specialty area(s).
- 01.14 Practice approved methods to dispose of waste materials.
- 01.15 Read, comprehend and follow instructions on warning labels.
- 01.16 Demonstrate common sense when working with others.
- 01.17 Demonstrate a working knowledge of the safety color code.

02.0 Demonstrate understanding of graphic communications occupations and processes -- The student will be able to:
- 02.01 Define the role of graphics in the enterprise system.
- 02.02 Identify printing markets and types of printing business.
- 02.03 List printing’s ranking among other industries.
- 02.04 Identify the major printing process.
- 02.05 List the advantages of each major process.
- 02.06 List the disadvantages of each major process.
- 02.07 Identify the products produced by each major process.
- 02.08 List in order of business flow of printing from initial need to a final product.
- 02.09 List in order the technical production flow from idea to a finished product.
- 02.10 Identify major occupations in the graphic arts.
- 02.11 List the major responsibilities for each occupation.
- 02.12 Identify basic salary/wage expectation ranges for local area.

03.0 Demonstrate proficiency in art and copy preparation -- The student will be able to:
- 03.01 Identify basic equipment and tools for a paste-up.
- 03.02 Identify basic materials and hand tools for a paste-up.
- 03.03 Demonstrate how to prepare thumbnail layouts.

03.04 Demonstrate how to prepare rough layouts.
03.05 Demonstrate how to prepare comprehensive layouts including a finished working dummy.
03.06 Employ the use of printers' measurements to compute inches and fractions, points and picas, decimals, percentages, and proportions.
03.07 Demonstrate how to use copy fitting and mark up procedures to specify type sizes, styles and etc.
03.08 Prepare a paste-up mechanical with elements including key line for photographs, title blocks and rulings.
03.09 Prepare a tissue overlay and specify color break, tint percentages and reverses.
03.10 Check and compare completed mechanical to comprehensive layouts for final proofing.

04.0 Demonstrate proficiency in pre-press/imaging operations -- The student will be able to:
04.01 Identify basic equipment and tools and the safety rules pertaining to pre-press/imaging operation.
04.02 Demonstrate how to choose type using the correct size and format.
04.03 Identify fundamentals of type and its uses.
04.04 Identify the various kinds of items that can be designed and produced using a page layout program.
04.05 Demonstrate keyboarding skills.
04.06 State how to organize a file management system for opening, copying, saving and deleting files.
04.07 Demonstrate file management operations for opening, copying, saving and deleting files.
04.08 Demonstrate how to log-on/boot-up and print out a page layout program and demonstrate a functional knowledge of computer commands/codes/menu/palette for the software in use.
04.09 Demonstrate how to set text with appropriate margins, formatting, gutters, leading, headings, etc.
04.10 Demonstrate how to flow copy from a word processing program according to job specifications.

05.0 Demonstrate proficiency in reproduction photography -- The student will be able to:
05.01 Identify the equipment and materials used in reproduction photography and the safety rules pertaining to each.
05.02 Identify the parts of the process camera and explain their use.
05.03 Apply basic principles of light pertaining to copy board illuminations and exposure calculations for all camera functions.
05.04 Apply basic principles of darkroom chemistry.
05.05 Prepare darkroom chemistry.
05.06 Demonstrate how to establish basic line exposure and exposure time at 100% using standard time and temperature development.
05.07 Apply basic principles of Kodak halftone computer and density guide.
05.08 Demonstrate how to establish basic exposure to determine screen range, basic flash, main exposure, and bump exposure at 100% using standard time and temperature development.
05.09 Demonstrate how to produce line negatives to size.
05.10 Demonstrate how to inspect and compare line negatives to original mechanical.
05.11 Demonstrate how to produce a halftone to size.
05.12 Demonstrate how to inspect and compare halftones to original copy.

05.13 Demonstrate how to make line and halftone diffusion transfer prints.
05.14 Demonstrate how to inspect and compare prints to original mechanical.
05.15 Identify the parts of a contact frame and point light source and explain their use.
05.16 Demonstrate how to reduce contacts using orthochromatic and duplicating film, transmission density guide and standard time and temperature development.

06.0 Demonstrate proficiency in image assembly/plate making -- The student will be able to:
06.01 Identify basic stripping equipment and hand tools.
06.02 Identify basic stripping materials and supplies.
06.03 Demonstrate how to produce a single color flat with correct dimensions and window(s).
06.04 Demonstrate how to make necessary corrections to flat (IE, opaque/scribing).
06.05 Identify plate making equipment and tools for offset metal plates.
06.06 Identify plate material types and processing chemicals for making offset metal plates.
06.07 Demonstrate how to produce a correctly exposed and processed metal plate for offset printing.
06.08 Identify direct transfer plate making equipment.
06.09 Identify direct transfer plate and processing materials.
06.10 Demonstrate how to produce a direct transfer plate for offset printing.
06.11 Identify pin registration systems.

07.0 Demonstrate proficiency in performing basic offset press operations -- The student will be able to:
07.01 Identify basic offset duplicator parts and operations.
07.02 Identify basic safety and operation procedures for an Offset Duplicator 1 or single color printing.
07.03 Demonstrate basic setup procedures for printing a single color job.
07.04 Produce a printed single color job using an offset duplicator.

08.0 Demonstrate proficiency in basic finishing/binding operations -- The student will be able to:
08.01 Identify operational and safety parts of a paper cutter.
08.02 Identify grain direction of paper.
08.03 Demonstrate how to calculate basic paper cuts from a stock sheet.
08.04 Demonstrate how to draw a master cutting diagram for making cuts.
08.05 Demonstrate how to make accurate paper cuts using a mechanized paper cutter.
08.06 Identify basic paper types, weights, grades and classifications used in the printing industry.
08.07 Identify padding materials.
08.08 Demonstrate how to produce correctly made pads of paper.
08.09 Identify stapling and stitching equipment and hand tools.
08.10 Identify stapling and stitching materials and supplies.
08.11 Demonstrate how to produce side and saddle stitched/stapled products.
08.12 Identify punching/drilling equipment and hand tools.
08.13 Demonstrate how to measure to drill 3 ring notebook pages.
08.14 Demonstrate how to make holes for 3 ring notebooks.
08.15 Identify folding equipment and hand tools.
08.16 Identify basic folds for printed products.
08.17 Demonstrate how to make a single fold using an automatic folding machine.
08.18 Identify collating equipment and hand tools.

08.19 Demonstrate how to make sets of paper using collating equipment in proper sequence.
08.20 Demonstrate how to hand collate sets in proper sequence.
08.21 Identify the cut products and the basic procedure for die cutting.
08.22 Identify hot foil stamped products, basic equipment materials and procedures for foil stamping.

09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
09.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
09.02 Locate, organize and reference written information from various sources. CM 3.0
09.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
09.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
09.05 Apply active listening skills to obtain and clarify information. CM 7.0
09.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
09.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

10.0 Demonstrate appropriate math skills -- The student will be able to:
10.01 Demonstrate how to solve addition, subtraction, multiplication and division of whole numbers.
10.02 Demonstrate how to solve addition, subtraction, multiplication and division of fractions.
10.03 Demonstrate how to solve addition, subtraction, multiplication and division of decimals.
10.04 Demonstrate how to solve fraction to decimal and decimal to fraction conversion problems.
10.05 Demonstrate how to solve decimal to percent and percent to decimal conversion problems.
10.06 Demonstrate how to solve basic ratio and proportion problems.
10.07 Demonstrate how to solve basic liner measurement problems.
10.08 Demonstrate how to solve basic inches to picas and picas to inches conversion problems.
10.09 Demonstrate how to solve inches to points and points to inches conversion problems.
10.10 Demonstrate how to solve cost calculating problems.

11.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
11.01 Demonstrate knowledge of arithmetic operations. AF3.2
11.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
11.03 Construct charts/tables/graphs using functions and data. AF3.5

12.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
12.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
12.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

13.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

13.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
13.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
13.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
13.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
13.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
13.06 Identify and exhibit traits for retaining employment. ECD 7.0
13.07 Identify opportunities and research requirements for career advancement. ECD 8.0
13.08 Research the benefits of ongoing professional development. ECD 9.0
13.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: GRA0013
Occupational Completion Point: B
Process Camera Operator – 300 Hours – SOC Code 51-5022

14.0 Demonstrate proficiency in performing basic film assembly and plate making competencies -- The student will be able to:

14.01 Read and comprehend production information on a job jacket/ticket.
14.02 Identify the equipment, tools and materials used in film assembly operations their parts, functions, and safety rules relating to their operation.
14.03 Apply basic math skills to the film assembly operations.
14.04 Demonstrate how to establish the “true edge” and “vertical alignment” on a film assembly table (squaring the table).
14.05 Demonstrate how to layout, measure and rule an unlined masking sheet showing relevant guidelines (guide edge of the sheet, gripper margins, plate clamp, center marks, etc.) for 8 1/2” X 11” single color work.
14.06 Demonstrate how to assemble and properly attach negatives to an 8 1/2” X 11” or larger size color flat.
14.07 Demonstrate how to make appropriate corrections to a film negative and flat.
14.08 Demonstrate how to layout, measure and rule an unlined masking sheet showing relevant guidelines (guide edge of the sheet, gripper margins, plate clamp, center marks, side guides, etc.) for an 11” X 17” or larger single color work.
14.09 Demonstrate how to assemble and properly attach negatives to an 11” X 17” or larger single color flat.
14.10 Demonstrate how to assemble and properly attach negatives to a 10” X 15” or larger single color pre-ruled flat.
14.11 Demonstrate how to layout, measure and rule an unlined masking sheet showing relevant guidelines (guide edge of the sheet, gripper margins, plate clamp, center marks, side guides, etc.) for an 8 1/2” X 11” multicolor work using pin register system.
14.12 Demonstrate how to assemble a single color flat for an envelope.
14.13 Demonstrate how to assemble a single color flat for a work and turn imposition.
14.14 Demonstrate how to assemble a single color flat for a work and tumble imposition.
14.15 Demonstrate how to assemble a single color flat for a screen tint.
14.16 Demonstrate how to assemble a single color flat for a 4-page sheet wise imposition.
14.17 Demonstrate how to assemble a single color flat for an 8-page signature.

14.18 Demonstrate how to assemble a single color flat for a line and halftone combination flat.
14.19 Demonstrate how to assemble multicolor flats with color quality control bars.
14.20 Demonstrate how to assemble a single color flat for step and repeat without using a pin register system.
14.21 Demonstrate how to assemble a single color flat for step and repeat with a pin register system.
14.22 Demonstrate how to assemble a multi color job that uses masking film as a mechanical negative.
14.23 Demonstrate how to perform exposure tests for light-sensitive materials used in the film assembly area.
14.24 Demonstrate how to check registration of multiple flats using daylight proofing material.
14.25 Demonstrate how to prepare a spread negative or positive for image fit using a contact control wedge as a guide.
14.26 Demonstrate how to produce a choke negative or positive for image fit using a contact wedge as a guide.
14.27 Demonstrate how to produce a composite negative.
14.28 Demonstrate how to assembly multicolor, emulsion-up, flats with registration marks, color bars and slur bars on clear masking material.
14.29 Demonstrate how to expose and process a multicolor job using blue line/color proofing materials.
14.30 Demonstrate how to inspect and compare proof to originals.
14.31 Identify the equipment, tools, and materials used in plate making operations, their parts, functions, and safety rules relating to their operation.
14.32 Apply the basic math skills to the plate making operations.
14.33 Demonstrate how to perform exposure tests for light-sensitive materials used in the plate making area using a sensitivity guide.
14.34 Identify the different plate materials, types and processing chemicals and methods used for each.
14.35 Demonstrate how to expose, process and preserve metal plates.
14.36 Demonstrate how to make additions, deletions and repairs to metal plates.
14.37 Demonstrate how to expose, process and protect photo direct or transfer plates.
14.38 Demonstrate how to make additions, deletions and repairs to photo direct or transfer plates.
14.39 Demonstrate how to inspect and compare plates to proofs.
14.40 Demonstrate how to properly handle, file, store and retrieve flats and plates.

Course Number: GRA0014
Occupational Completion Point: C
Layout Designer/Planner – 450 Hours – SOC Code 51-5022

15.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
15.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
15.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
15.03 Present information formally and informally for specific purposes and audiences. AF2.9

16.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:

16.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
16.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
16.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
16.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

17.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:

17.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
17.02 Explain emergency procedures to follow in response to workplace accidents.
17.03 Create a disaster and/or emergency response plan.

18.0 Demonstrate proficiency in basic electronic imaging competencies -- The student will be able to:

18.01 Read and comprehend production information on a job jacket/ticket.
18.02 Identify the various kinds of items that can be designed and produced using desktop publishing.
18.03 Identify the basic principles of design (i.e. unity, contrast, page proportions, balance, etc.)
18.04 Demonstrate how to incorporate the basic design principles in hand drawn sketches and measured layouts.
18.05 Identify line copy.
18.06 Identify continuous tone, halftone copy.
18.07 Identify basic process color principles and four kinds of color printing.
18.08 Demonstrate understanding of electronic color proofing techniques.
18.09 Identify basic desktop publishing equipment.
18.10 Define the limitations and capabilities of desktop publishing.
18.11 Define the differences in quality of photo-processed output and laser printer output.
18.12 Demonstrate understanding of postscript software capabilities.
18.13 Define the operation of the hardware components of a computer aided publishing system.
18.14 Demonstrate how to select appropriate software for word processing, graphics, scanning and page layout.
18.15 Demonstrate a keyboard typing proficiency of a minimum of 30 WPM.
18.16 State how to organize a file management system for opening, copying, saving and deleting files.
18.17 Demonstrate file management operations for opening, copying, saving and deleting files.
18.18 Demonstrate how to prepare a series of hand drawn sketches for layouts incorporating appropriate marks (i.e. gutters, register marks, fold lines, etc.).
18.19 Demonstrate how to prepare a dummy for a multi page signature.
18.20 Demonstrate an understanding of data exchange.

19.0 Demonstrate proficiency in the use of type and typography -- The student will be able to:

19.01 Demonstrate how to measure copy/text in points and picas using a line gauge.
19.02 Demonstrate how to measure type using a type fitting gauge.

19.03 Demonstrate how to identify x-height, mean-line, baseline, ascenders, descenders, and their roles in measuring and designing with type.
19.04 Demonstrate how to identify caps, lowercase, uppercase, small caps and ligatures.
19.05 Define dingbats, bullets, rules, and symbols and their uses in publications.
19.06 Demonstrate how to distinguish between display (headline) type and body (text) type by their point sizes and styles.
19.07 Demonstrate how to identify the basic type styles and their uses.
19.08 Define the “weight” and “posture” of type.
19.09 Demonstrate how to distinguish between serif and sans serif type styles.
19.10 Define letter spacing and kerning of type characters.
19.11 Define word spacing and the relationship of em and en in paragraph spacing.
19.12 Define line spacing and explain the measurement principles for the leading of text.
19.13 Define the type arrangements: flush left, ragged right, flush right, ragged left, centered, justified, and forced justified.
19.14 Define and demonstrate copy fitting.

20.0 Demonstrate proficiency in using page layout operations -- The student will be able to:
21.0 Demonstrate how to prepare rough layouts.
21.01 Demonstrate how to markup a copy for production of a printed piece.
21.02 Demonstrate how to select appropriate page layout software for a given job.
21.03 Demonstrate how to log-on/boot-up and print out a page layout program and demonstrate a functional knowledge of computer commands/codes/menus/palette for the software in use.
21.04 Demonstrate text alignment, element positioning and rules of page design for printed matter.
21.05 Demonstrate how to set up column grids for electronic page layout according to job specifications.
21.06 Demonstrate how to set up/select appropriate pagination for a given job.
21.07 Demonstrate the uses of footers and headers.
21.08 Demonstrate how to set text with appropriate margins, formatting, gutters, leading, headings etc.
21.09 Demonstrate a proficiency in conducting basic search operations.
21.10 Demonstrate how to place copy from word processing program to a page layout program according to job specifications.
21.11 Demonstrate how to proofread, edit and make corrections/adjustment to copy on screen.
21.12 Demonstrate how to download fonts.
21.13 Demonstrate how to place graphics, rules, dingbats, from an existing file into a publication.
21.14 Demonstrate the procedure for cropping graphics electronically.
21.15 Demonstrate how to create a 2 sided, 3 panel brochure using graphics and text for publication.
21.16 Demonstrate how to create a 4-page newsletter using windows, blocks, text, graphics, frames and headings.
21.17 Demonstrate how to create a 2-page newsletter using drop caps for paragraph openings, wraparound (run-around) and graphics.
21.18 Demonstrate how to create a printed piece using tints, reverses and manipulated type for effect.

21.19 Demonstrate how to produce a multicolor flyer using electronic spot color separations.
21.20 Demonstrate knowledge of available page layout programs - capabilities, advantage, and disadvantages.
21.21 Demonstrate the use of an electronic dictionary, spell checker, and automatic hyphenation.

22.0 Demonstrate proficiency in scanning operations -- The student will be able to:
22.01 Identify scanner hardware and its basic components and operations.
22.02 Identify basic scanner software, its uses and limitations.
22.03 Demonstrate appropriate scanner/program operations for continuous tone copy.
22.04 Demonstrate how to place scanned graphics/photos into existing page layout program.

23.0 Demonstrate understanding of a vector base graphics program -- The student will be able to:
23.01 Demonstrate how to log-on/boot-up vector-based graphics program and demonstrate a functional knowledge of commands/codes/menus/hand tools and procedures for their uses.
23.02 Demonstrate how to draw a design appropriate for a given job using a graphic program.
23.03 Demonstrate how to create a design using tints, fills and paint for a given job using a graphics program.
23.04 Demonstrate how to create a design using manipulated type (rotated, circled, extended, etc.) for a publication.
23.05 Demonstrate how to trace a drawing/photograph using a graphics program.
23.06 Demonstrate how to create a design/publication using electronic clip art.

24.0 Demonstrate proficiency in electronic pre-press operations -- The student will be able to:
24.01 Define the application of digital photography in electronic imaging.
24.02 List the capabilities and functions of image setters.
24.03 Identify and compare digital proofs.
24.04 Identify and compare networking systems.
24.05 Define the current systems/techniques for outputting files direct to plate material.
24.06 Demonstrate an understanding of the PostScript page description language.
24.07 Demonstrate how to compare the leading operating systems in performance, use and capabilities.
24.08 Define storage guidelines and limitations.
24.09 List the advantages and disadvantages of different storage media, such as syquest, optical, etc.
24.10 List the use and capabilities of storage devices for electronic imaging work, transport and storage.
24.11 Describe the strengths and weaknesses of TIFF, EPS, PICT and DCS in a Postscript environment.
24.12 Demonstrate how to translate files from DOS to Mac formats.
24.13 Demonstrate how to use a file compression utility for file transfer or storage.
24.14 Describe the differences between True Type and PostScript fonts.
24.15 Demonstrate how to use a telecommunications program and a modem to transfer files.
24.16 Demonstrate how to create a single color layout using clip art.
24.17 Demonstrate how to create a single color layout using work and turn.

24.18 Demonstrate how to change contrast using tint screens and shading techniques.
24.19 Demonstrate how to create a logo design on a computer and integrate it into a brochure design.
24.20 Demonstrate how to produce special effects type using a graphics application.
24.21 Demonstrate how to produce a job on the computer using electronic imposition.
24.22 Demonstrate how to create a job that incorporates electronic trapping.
24.23 Demonstrate how to produce a multicolor job that includes scans, text and spot color artwork.
24.24 Demonstrate how to prepare page layout files containing graphic images for remote output.
24.25 Demonstrate how to follow instructions to produce, modify or output files according to a customer supplied criteria.
24.26 Demonstrate how to use OCR software to capture text.
24.27 Demonstrate how to calibrate a desktop color scanner.
24.28 Demonstrate how to produce a color scan.
24.29 Demonstrate how to use a photo manipulation program to perform basic color correction and basic image cloning.
24.30 Demonstrate how to calibrate a color monitor.
24.31 Define how film processor variations affect final output.
24.32 Define quality control checks on the film processor.
24.33 Define the use and capabilities of storage devices for electronic imaging work transport and storage.
24.34 Define the strengths and weaknesses of TIFF, EPS, PICT and DCS in a Postscript environment.
24.35 Demonstrate how to translate files from DOS to Mac formats.
24.36 Use a file compression utility for file transfer or storage.
24.37 Define the differences between True Type and Postscript fonts.
24.38 Demonstrate how to use a telecommunications program and a modem to transfer files.
24.39 Demonstrate how to create a single color layout using clip art.
24.40 Demonstrate how to create a single color layout using work and turn.
24.41 Demonstrate how to change contrast using tint screens and shading techniques.
24.42 Demonstrate how to create logo design on a computer and integrate into a brochure design.
24.43 Demonstrate how to produce special effects type using a graphics application.
24.44 Demonstrate how to produce a job on the computer using electronic imposition.
24.45 Demonstrate how to create a job that incorporates electronic trapping.
24.46 Demonstrate how to produce a multicolor job that includes scans, text and spot color artwork.
24.47 Demonstrate how to prepare page layout files containing graphic images for remote output
24.48 Demonstrate how to follow instructions to produce, modify or output files according to customer supplied criteria.
24.49 Demonstrate how to use OCR software to capture text.
24.50 Demonstrate how to calibrate a desktop color scanner.
24.51 Demonstrate how to produce a color scan.
24.52 Demonstrate how to use a photo manipulation program to perform basic color correction and basic image cloning.
24.53 Demonstrate how to calibrate a color monitor.
24.54 Define how film processor variations affect final output.
24.55 Define quality control checks on the film processor.

Course Number: GRA0015
Occupational Completion Point: D
Duplicator Operator– 450 Hours – SOC Code 51-5023

24.0 Use information technology tools--The students will be able to:
- 24.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 24.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 24.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 24.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

25.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 25.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 25.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 25.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 25.04 Employ mentoring skills to inspire and teach others. LT 5.0

26.0 Demonstrate proficiency in operation of basic offset press -- The student will be able to:
- 26.01 Identify the equipment and materials used in offset press operations, their parts and functions, and the safety rules relating to their operation.
- 26.02 Apply basic principles of offset lithography pertaining to physical and chemical properties of ink components (pigment, vehicle, and dryer).
- 26.03 Apply basic principles of offset lithography pertaining to dampening systems (ducted and continuous).
- 26.04 Apply basic principles of offset lithography pertaining to fountain solutions chemical components (acid, alkaline, and neutral).
- 26.05 Apply basic principles of offset lithography pertaining to ph-control and its effects on the lithographic process.
- 26.06 Apply basic principles of offset lithography pertaining to interrelationships upon the process of paper (coated and uncoated and various grades within).
- 26.07 Demonstrate how to determine grain directions of paper.
- 26.08 Demonstrate how to handle and jog paper stock (wire/felt, watermarks, carbonless sequence).
- 26.09 Demonstrate how to identify paper weight, coating and sizes.
- 26.10 Demonstrate how to identify paper problems, curling, dust, moisture, flaring, etc.
- 26.11 Apply basic principles of offset lithography pertaining to the interrelationships of textured or smooth paper; paper, plastic, metal plates, and conventional or compressible blankets.
- 26.12 Apply basic principles of offset lithography pertaining to ink and its drying properties in relation to fountain solution, plate and paper used (including effects of ink film thickness and drying time and set off; and problems associated with inappropriate use of spray powder).
- 26.13 Apply basic principles of plate preservation after presswork for long-time storage (use of gum Arabic and Asphaltum).

26.14 Demonstrate how to prepare a press for operation by reviewing job-ticket specifications and then selecting appropriate press and materials.

26.15 Demonstrate how to prepare a press for operation based on interrelationships of lithographic process.

26.16 Demonstrate how to mix fountain solution from concentrate

26.17 Demonstrate how to mix ink to color matching systems specifications (PMS, etc.).

26.18 Demonstrate how to introduce ink and fountain solution to press in proper sequence.

26.19 Demonstrate how to set up and adjust feeder to paper specifications (air blast, vacuum and choke).

26.20 Demonstrate how to set up and adjust register system to single sheet or stream fed, side guide, and head register.

26.21 Demonstrate how to set up and adjust delivery (chute or chain).

26.22 Demonstrate how to mount blanket (pack if necessary) and adjust to press specifications.

26.23 Demonstrate how to set impression cylinder to paper thickness and press specifications.

26.24 Demonstrate how to set and adjust ink and water rollers pressures to press specifications.

26.25 Demonstrate how to make-ready a press to assure ink and water balance for uniform coverage, volume and replenishment of ink, image position, cylinder pressure, and sheet registration.

26.26 Demonstrate how to make additions, deletions and repairs to offset plate.

26.27 Demonstrate how to inspect and evaluate final make-ready sheet to job-ticket specifications and obtain proof approval to run.

26.28 Demonstrate how to set spray powder.

26.29 Demonstrate how to produce required number of press sheets to job-ticket specifications.

26.30 Demonstrate how to preserve plate for long-term storage.

26.31 Demonstrate how to perform press wash-up and roller treatment.

26.32 Demonstrate how to perform press maintenance to manufacturers' specifications.

26.33 Demonstrate how to apply basic principles of offset press operations with regard to work and turn, work and tumble and sheet wise printed products.

26.34 Demonstrate how to produce a tight register one-color project.

26.35 Demonstrate how to produce a tight register one or two-color, pre-collated carbonless project.

26.36 Demonstrate how to produce a two color tight register project.

26.37 Demonstrate how to print a two color job on a duplicator using a T-head.

26.38 Demonstrate how to produce a one or two color tight register envelope project.

26.39 Demonstrate how to produce a tight register one-color metallic ink project.

26.40 Demonstrate how to produce a tight register one or two color folding two sided project.

26.41 Demonstrate how to produce a multicolor tight register project.

26.42 Demonstrate an understanding and identify troubleshooting problems on a duplicator.

26.43 Define and identify direct imaging technologies.

26.44 Demonstrate how to clean and secure duplicator for down time.

Course Number: GRA0016
Occupational Completion Point: E
General Bindery Worker – 150 Hours – SOC Code 51-5011

27.0 Demonstrate proficiency in performing basic finishing and distribution competencies -- The student will be

27.01 Demonstrate how to read and comprehend production information on a job jacket/ticket.
27.02 Demonstrate how to identify the equipment and materials used in finishing and distribution operations, their parts, functions, and safety rules relating to their operation.
27.03 Demonstrate how to apply basic math skills to the binding and distribution operations.
27.04 Demonstrate how to prepare folding dummy from press sheet in accordance with job ticket specifications and approved proof.
27.05 Demonstrate how to setup and operate folder in accordance with job ticket specifications and folding dummy
27.06 Demonstrate how to use folding equipment to produce single, gate and accordion folds.
27.07 Define and identify right angle folds.
27.08 Apply basic principles of finishing and distribution following folded bound signature impositions to allow for lips, trims and bleeds according to saddle- and side-stitch binding method.
27.09 Define and identify slitting, perforating and scoring functions and equipment pertaining to folding operations.
27.10 Define how to use and setup cutters.
27.11 Demonstrate how to prepare rule-out of press sheet for finishing operations according to job ticket specifications and approved proof.
27.12 Demonstrate how to setup and operate cutter in accordance with rule-out.
27.13 Demonstrate how to square substrate.
27.14 Define and identify problems with substrate.
27.15 Define the proper maintenance procedures for paper cutters.
27.16 Define how to change the blade on a paper cutter.
27.17 Define and identify the most commonly used types of paper.
27.18 Demonstrate knowledge of paper types related to their printing, folding and binding characteristics.
27.19 Demonstrate how to hand-jog 8 1/2" x 11" substrate.
27.20 Demonstrate how to hand-jog 17" x 22" or larger substrate.
27.21 Demonstrate how to machine-jog substrate.
27.22 Define and identify off-line finishing systems.
27.23 Define the fundamentals of saddle stitching and perfect binding.
27.24 Define and identify the use of automated sorting and labeling equipment.
27.25 Define and identify mail class rates (bulk, presorted, etc.)
27.26 Define and identify the quality control methods for bar codes in relation to postal standards.
27.27 Define and identify embossing procedures and equipment.
27.28 List the common problems encountered in embossing.
27.29 Identify the components of case, spiral and perfect bound books.
27.30 Define and identify modern book binding equipment with hand binding techniques.
27.31 Demonstrate how to store and properly handle substrates.

27.32 Define and identify U-V coatings.
27.33 List the advantages and disadvantages of U-V coatings.
27.34 Demonstrate how to estimate the cost of materials and production for performing bindery operations; cutting, scoring, folding, packaging and coating.
27.35 Demonstrate how to setup and operate stitcher (side and saddle).
27.36 List the techniques used to control waste production and disposal in a modern bindery.
27.37 Define and identify spiral, comb and wire binding equipment and supplies.
27.38 Define tipping procedures.
27.39 Demonstrate how to perform preventive maintenance on binding and finishing equipment.
27.40 Demonstrate methods of counting substrate (machine, measurement, weight and rapid multiple-sheet manual counting by fives).
27.41 Define collating flat sheets.
27.42 Demonstrate how to setup and operate a paper drill for standard loose-leaf binder.
27.43 Define and identify packaging and shrink wrapping equipment.
27.44 Demonstrate how to package and identify completed job according to job specifications.

28.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
28.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
28.02 Describe the effect of money management on personal and career goals. FL 3.0
28.03 Develop a personal budget and financial goals. FL3.1
28.04 Complete financial instruments for making deposits and withdrawals. FL3.2
28.05 Maintain financial records. FL3.3
28.06 Read and reconcile financial statements. FL3.4
28.07 Research, compare and contrast investment opportunities.

29.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
29.01 Describe the nature and types of business organizations. SY 1.0
29.02 Explain the effect of key organizational systems on performance and quality.
29.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
29.04 Explain the impact of the global economy on business organizations. HE 2.0

30.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
30.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
30.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
30.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
30.04 Interpret and explain written organizational policies and procedures. ELR 2.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Printing & Graphic Communications 1**
Course Number:	**8739010**
Course Credit:	**1**

Course Description:

This course is designed to provide instruction in the different procedures and skills to perform, first aid, art and copy and pre-press operations.

01.0 Demonstrate understanding of safety and first aid practices -- The student will be able to:
- 01.01 Identify location(s) of fire safety equipment.
- 01.02 Describe proper use of fire safety equipment.
- 01.03 List safety rules involving flammable liquids.
- 01.04 List the steps to be taken in case of injury in the lab.
- 01.05 Identify location(s) of first aid kit(s) and eye wash station(s).
- 01.06 Discuss the importance of the Material Safety Data Sheets (MSDS).
- 01.07 Identify protective safety equipment where needed (gloves, goggles, ear plugs, etc.).
- 01.08 Practice proper safety procedures when operating equipment.
- 01.09 Practice approved shop dress code for safe operation including necessary personal safety equipment.
- 01.10 Pass a general lab safety test.
- 01.11 Demonstrate acceptable employee health habits.
- 01.12 Demonstrate knowledge of the “Right-to-Know Law”.
- 01.13 Pass a safety test in an individual’s specialty area(s).
- 01.14 Practice approved methods to dispose of waste materials.
- 01.15 Read, comprehend and follow instructions on warning labels.
- 01.16 Demonstrate common sense when working with others.
- 01.17 Demonstrate a working knowledge of the safety color code.

02.0 Demonstrate understanding of graphic communications occupations and processes -- The student will be able to:
- 02.01 Define the role of graphics in the enterprise system.
- 02.02 Identify printing markets and types of printing business.
- 02.03 List printing’s ranking among other industries.
- 02.04 Identify the major printing process.
- 02.05 List the advantages of each major process.
- 02.06 List the disadvantages of each major process.
- 02.07 Identify the products produced by each major process.
- 02.08 List in order of business flow of printing from initial need to a final product.
- 02.09 List in order the technical production flow from idea to a finished product.
- 02.10 Identify major occupations in the graphic arts.
- 02.11 List the major responsibilities for each occupation.
- 02.12 Identify basic salary/wage expectation ranges for local area.

03.0 Demonstrate proficiency in art and copy preparation -- The student will be able to:
- 03.01 Identify basic equipment and tools for a paste-up.

03.02 Identify basic materials and hand tools for a paste-up.
03.03 Demonstrate how to prepare thumbnail layouts.
03.04 Demonstrate how to prepare rough layouts.
03.05 Demonstrate how to prepare comprehensive layouts including a finished working dummy.
03.06 Employ the use of printers' measurements to compute inches and fractions, points and picas, decimals, percentages, and proportions.
03.07 Demonstrate how to use copy fitting and mark up procedures to specify type sizes, styles and etc.
03.08 Prepare a paste-up mechanical with elements including key line for photographs, title blocks and rulings.
03.09 Prepare a tissue overlay and specify color break, tint percentages and reverses.
03.10 Check and compare completed mechanical to comprehensive layouts for final proofing.

04.0 Demonstrate proficiency in pre-press/imaging operations -- The student will be able to:
04.01 Identify basic equipment and tools and the safety rules pertaining to pre-press/imaging operation.
04.02 Demonstrate how to choose type using the correct size and format.
04.03 Identify fundamentals of type and its uses.
04.04 Identify the various kinds of items that can be designed and produced using a page layout program.
04.05 Demonstrate keyboarding skills.
04.06 State how to organize a file management system for opening, copying, saving and deleting files.
04.07 Demonstrate file management operations for opening, copying, saving and deleting files.
04.08 Demonstrate how to log-on/boot-up and print out a page layout program and demonstrate a functional knowledge of computer commands/codes/menu/palette for the software in use.
04.09 Demonstrate how to set text with appropriate margins, formatting, gutters, leading, headings, etc.
04.10 Demonstrate how to flow copy from a word processing program according to job specifications.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 2**
Course Number: **8739020**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in performing reproduction photography and image assembly/plate making.

05.0 Demonstrate proficiency in reproduction photography -- The student will be able to:
- 05.01 Identify the equipment and materials used in reproduction photography and the safety rules pertaining to each.
- 05.02 Identify the parts of the process camera and explain their use.
- 05.03 Apply basic principles of light pertaining to copy board illuminations and exposure calculations for all camera functions.
- 05.04 Apply basic principles of darkroom chemistry.
- 05.05 Prepare darkroom chemistry.
- 05.06 Demonstrate how to establish basic line exposure and exposure time at 100% using standard time and temperature development.
- 05.07 Apply basic principles of Kodak halftone computer and density guide.
- 05.08 Demonstrate how to establish basic exposure to determine screen range, basic flash, main exposure, and bump exposure at 100% using standard time and temperature development.
- 05.09 Demonstrate how to produce line negatives to size.
- 05.10 Demonstrate how to inspect and compare line negatives to original mechanical.
- 05.11 Demonstrate how to produce a halftone to size.
- 05.12 Demonstrate how to inspect and compare halftones to original copy.
- 05.13 Demonstrate how to make line and halftone diffusion transfer prints.
- 05.14 Demonstrate how to inspect and compare prints to original mechanical.
- 05.15 Identify the parts of a contact frame and point light source and explain their use.
- 05.16 Demonstrate how to reduce contacts using orthochromatic and duplicating film, transmission density guide and standard time and temperature development.

06.0 Demonstrate proficiency in image assembly/plate making -- The student will be able to:
- 06.01 Identify basic stripping equipment and hand tools.
- 06.02 Identify basic stripping materials and supplies.
- 06.03 Demonstrate how to produce a single color flat with correct dimensions and window(s).
- 06.04 Demonstrate how to make necessary corrections to flat (IE, opaque/scribing).
- 06.05 Identify plate making equipment and tools for offset metal plates.
- 06.06 Identify plate material types and processing chemicals for making offset metal plates.
- 06.07 Demonstrate how to produce a correctly exposed and processed metal plate for offset printing.
- 06.08 Identify direct transfer plate making equipment.
- 06.09 Identify direct transfer plate and processing materials.
- 06.10 Demonstrate how to produce a direct transfer plate for offset printing.

06.11 Identify pin registration systems.

07.0 Demonstrate proficiency in performing basic offset press operations --The student will be able to:

07.01 Identify basic offset duplicator parts and operations.
07.02 Identify basic safety and operation procedures for an Offset Duplicator 1 or single color printing.
07.03 Demonstrate basic setup procedures for printing a single color job.
07.04 Produce a printed single color job using an offset duplicator.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 3**
Course Number: **8739030**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in the different procedures for finishing/binding operations and basic skills.

08.0 Demonstrate proficiency in basic finishing/binding operations --The student will be able to:
- 08.01 Identify operational and safety parts of a paper cutter.
- 08.02 Identify grain direction of paper.
- 08.03 Demonstrate how to calculate basic paper cuts from a stock sheet.
- 08.04 Demonstrate how to draw a master cutting diagram for making cuts.
- 08.05 Demonstrate how to make accurate paper cuts using a mechanized paper cutter.
- 08.06 Identify basic paper types, weights, grades and classifications used in the printing industry.
- 08.07 Identify padding materials.
- 08.08 Demonstrate how to produce correctly made pads of paper.
- 08.09 Identify stapling and stitching equipment and hand tools.
- 08.10 Identify stapling and stitching materials and supplies.
- 08.11 Demonstrate how to produce side and saddle stitched/stapled products.
- 08.12 Identify punching/drilling equipment and hand tools.
- 08.13 Demonstrate how to measure to drill 3 ring notebook pages.
- 08.14 Demonstrate how to make holes for 3 ring notebooks.
- 08.15 Identify folding equipment and hand tools.
- 08.16 Identify basic folds for printed products.
- 08.17 Demonstrate how to make a single fold using an automatic folding machine.
- 08.18 Identify collating equipment and hand tools.
- 08.19 Demonstrate how to make sets of paper using collating equipment in proper sequence.
- 08.20 Demonstrate how to hand collate sets in proper sequence.
- 08.21 Identify the cut products and the basic procedure for die cutting.
- 08.22 Identify hot foil stamped products, basic equipment materials and procedures for foil stamping.

09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 09.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 09.02 Locate, organize and reference written information from various sources. CM 3.0
- 09.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 09.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 09.05 Apply active listening skills to obtain and clarify information. CM 7.0

09.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
09.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

10.0 Demonstrate appropriate math skills -- The student will be able to:
10.01 Demonstrate how to solve addition, subtraction, multiplication and division of whole numbers.
10.02 Demonstrate how to solve addition, subtraction, multiplication and division of fractions.
10.03 Demonstrate how to solve addition, subtraction, multiplication and division of decimals.
10.04 Demonstrate how to solve fraction to decimal and decimal to fraction conversion problems.
10.05 Demonstrate how to solve decimal to percent and percent to decimal conversion problems.
10.06 Demonstrate how to solve basic ratio and proportion problems.
10.07 Demonstrate how to solve basic liner measurement problems.
10.08 Demonstrate how to solve basic inches to picas and picas to inches conversion problems.
10.09 Demonstrate how to solve inches to points and points to inches conversion problems.
10.10 Demonstrate how to solve cost calculating problems.

11.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
11.01 Demonstrate knowledge of arithmetic operations. AF3.2
11.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
11.03 Construct charts/tables/graphs using functions and data. AF3.5

12.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
12.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
12.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

13.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
13.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
13.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
13.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
13.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
13.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
13.06 Identify and exhibit traits for retaining employment. ECD 7.0
13.07 Identify opportunities and research requirements for career advancement. ECD 8.0
13.08 Research the benefits of ongoing professional development. ECD 9.0
13.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 4**
Course Number: **8739040**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in the different procedures for performing basic film assembly and plate making.

14.0 Demonstrate proficiency in performing basic film assembly and plate making competencies -- The student will be able to:

- 14.01 Read and comprehend production information on a job jacket/ticket.
- 14.02 Identify the equipment, tools and materials used in film assembly operations their parts, functions, and safety rules relating to their operation.
- 14.03 Apply basic math skills to the film assembly operations.
- 14.04 Demonstrate how to establish the “true edge” and “vertical alignment” on a film assembly table (squaring the table).
- 14.05 Demonstrate how to layout, measure and rule an unlined masking sheet showing relevant guidelines (guide edge of the sheet, gripper margins, plate clamp, center marks, etc.) for 8 1/2” X 11” single color work.
- 14.06 Demonstrate how to assemble and properly attach negatives to an 8 1/2” X 11” or larger size color flat.
- 14.07 Demonstrate how to make appropriate corrections to a film negative and flat.
- 14.08 Demonstrate how to layout, measure and rule an unlined masking sheet showing relevant guidelines (guide edge of the sheet, gripper margins, plate clamp, center marks, side guides, etc.) for an 11” X 17” or larger single color work.
- 14.09 Demonstrate how to assemble and properly attach negatives to an 11” X 17” or larger single color flat.
- 14.10 Demonstrate how to assemble and properly attach negatives to a 10” X 15” or larger single color pre-ruled flat.
- 14.11 Demonstrate how to layout, measure and rule an unlined masking sheet showing relevant guidelines (guide edge of the sheet, gripper margins, plate clamp, center marks, side guides, etc.) for an 8 1/2” X 11” multicolor work using pin register system.
- 14.12 Demonstrate how to assemble a single color flat for an envelope.
- 14.13 Demonstrate how to assemble a single color flat for a work and turn imposition.
- 14.14 Demonstrate how to assemble a single color flat for a work and tumble imposition.
- 14.15 Demonstrate how to assemble a single color flat for a screen tint.
- 14.16 Demonstrate how to assemble a single color flat for a 4-page sheet wise imposition.
- 14.17 Demonstrate how to assemble a single color flat for an 8-page signature.
- 14.18 Demonstrate how to assemble a single color flat for a line and halftone combination flat.
- 14.19 Demonstrate how to assemble multicolor flats with color quality control bars.
- 14.20 Demonstrate how to assemble a single color flat for step and repeat without using a pin register system.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 5**
Course Number: **8739050**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in the different procedures for performing basic film assembly and plate making.

12.0 Demonstrate proficiency in performing basic film assembly and plate making competencies -- The student will be able to:
- 12.21 Demonstrate how to assemble a single color flat for step and repeat with a pin register system.
- 12.22 Demonstrate how to assemble a multi color job that uses masking film as a mechanical negative.
- 12.23 Demonstrate how to perform exposure tests for light-sensitive materials used in the film assembly area.
- 12.24 Demonstrate how to check registration of multiple flats using daylight proofing material.
- 12.25 Demonstrate how to prepare a spread negative or positive for image fit using a contact control wedge as a guide.
- 12.26 Demonstrate how to produce a choke negative or positive for image fit using a contact wedge as a guide.
- 12.27 Demonstrate how to produce a composite negative.
- 12.28 Demonstrate how to assembly multicolor, emulsion-up, flats with registration marks, color bars and slur bars on clear masking material.
- 12.29 Demonstrate how to expose and process a multicolor job using blue line/color proofing materials.
- 12.30 Demonstrate how to inspect and compare proof to originals.
- 12.31 Identify the equipment, tools, and materials used in plate making operations, their parts, functions, and safety rules relating to their operation.
- 12.32 Apply the basic math skills to the plate making operations.
- 12.33 Demonstrate how to perform exposure tests for light-sensitive materials used in the plate making area using a sensitivity guide.
- 12.34 Identify the different plate materials, types and processing chemicals and methods used for each.
- 12.35 Demonstrate how to expose, process and preserve metal plates.
- 12.36 Demonstrate how to make additions, deletions and repairs to metal plates.
- 12.37 Demonstrate how to expose, process and protect photo direct or transfer plates.
- 12.38 Demonstrate how to make additions, deletions and repairs to photo direct or transfer plates.
- 12.39 Demonstrate how to inspect and compare plates to proofs.
- 12.40 Demonstrate how to properly handle, file, store and retrieve flats and plates.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 6**
Course Number: **8739060**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in electronic imaging, and typography.

15.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 15.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 15.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 15.03 Present information formally and informally for specific purposes and audiences. AF2.9

16.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 16.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 16.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 16.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 16.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

17.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
- 17.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 17.02 Explain emergency procedures to follow in response to workplace accidents.
- 17.03 Create a disaster and/or emergency response plan.

18.0 Demonstrate proficiency in basic electronic imaging competencies -- The student will be able to:
- 18.01 Read and comprehend production information on a job jacket/ticket.
- 18.02 Identify the various kinds of items that can be designed and produced using desktop publishing.
- 18.03 Identify the basic principles of design (i.e. unity, contrast, page proportions, balance, etc.)
- 18.04 Demonstrate how to incorporate the basic design principles in hand drawn sketches and measured layouts.
- 18.05 Identify line copy.
- 18.06 Identify continuous tone, halftone copy.
- 18.07 Identify basic process color principles and four kinds of color printing.
- 18.08 Demonstrate understanding of electronic color proofing techniques.
  - 18.09 Identify basic desktop publishing equipment.
  - 18.10 Define the limitations and capabilities of desktop publishing.

18.11 Define the differences in quality of photo-processed output and laser printer output.
18.12 Demonstrate understanding of postscript software capabilities.
18.13 Define the operation of the hardware components of a computer aided publishing system.
18.14 Demonstrate how to select appropriate software for word processing, graphics, scanning and page layout.
18.15 Demonstrate a keyboard typing proficiency of a minimum of 30 WPM.
18.16 State how to organize a file management system for opening, copying, saving and deleting files.
18.17 Demonstrate file management operations for opening, copying, saving and deleting files.
18.18 Demonstrate how to prepare a series of hand drawn sketches for layouts incorporating appropriate marks (i.e. gutters, register marks, fold lines, etc.).
18.19 Demonstrate how to prepare a dummy for a multi page signature.
18.20 Demonstrate an understanding of data exchange.

19.0 Demonstrate proficiency in the use of type and typography -- The student will be able to:

19.01 Demonstrate how to measure copy/text in points and picas using a line gauge.
19.02 Demonstrate how to measure type using a type fitting gauge.
19.03 Demonstrate how to identify x-height, mean-line, baseline, ascenders, descenders, and their roles in measuring and designing with type.
19.04 Demonstrate how to identify caps, lowercase, uppercase, small caps and ligatures.
19.05 Define dingbats, bullets, rules, and symbols and their uses in publications.
19.06 Demonstrate how to distinguish between display (headline) type and body (text) type by their point sizes and styles.
19.07 Demonstrate how to identify the basic type styles and their uses.
19.08 Define the “weight” and “posture” of type.
19.09 Demonstrate how to distinguish between serif and sans serif type styles.
19.10 Define letter spacing and kerning of type characters.
19.11 Define word spacing and the relationship of em and en in paragraph spacing.
19.12 Define line spacing and explain the measurement principles for the leading of text.
19.13 Define the type arrangements: flush left, ragged right, flush right, ragged left, centered, justified, and forced justified.
19.14 Define and demonstrate copy fitting.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 7**
Course Number: **8739070**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in page layout operations and scanning operations.

20.0 Demonstrate proficiency in using page layout operations -- The student will be able to:
- 20.01 Demonstrate how to markup a copy for production of a printed piece.
- 20.02 Demonstrate how to select appropriate page layout software for a given job.
- 20.03 Demonstrate how to log-on/boot-up and print out a page layout program and demonstrate a functional knowledge of computer commands/codes/menus/palette for the software in use.
- 20.04 Demonstrate text alignment, element positioning and rules of page design for printed matter.
- 20.05 Demonstrate how to set up column grids for electronic page layout according to job specifications.
- 20.06 Demonstrate how to set up/select appropriate pagination for a given job.
- 20.07 Demonstrate the uses of footers and headers.
- 20.08 Demonstrate how to set text with appropriate margins, formatting, gutters, leading, headings etc.
- 20.09 Demonstrate a proficiency in conducting basic search operations.
- 20.10 Demonstrate how to place copy from word processing program to a page layout program according to job specifications.
- 20.11 Demonstrate how to proofread, edit and make corrections/adjustment to copy on screen.
- 20.12 Demonstrate how to download fonts.
- 20.13 Demonstrate how to place graphics, rules, dingbats, from an existing file into a publication.
- 20.14 Demonstrate the procedure for cropping graphics electronically.
- 20.15 Demonstrate how to create a 2 sided, 3 panel brochure using graphics and text for publication.
- 20.16 Demonstrate how to create a 4-page newsletter using windows, blocks, text, graphics, frames and headings.
- 20.17 Demonstrate how to create a 2-page newsletter using drop caps for paragraph openings, wraparound (run-around) and graphics.
- 20.18 Demonstrate how to create a printed piece using tints, reverses and manipulated type for effect.
- 20.19 Demonstrate how to produce a multicolor flyer using electronic spot color separations.
- 20.20 Demonstrate knowledge of available page layout programs - capabilities, advantage, and disadvantages.
- 20.21 Demonstrate the use of an electronic dictionary, spell checker, and automatic hyphenation.

21.0 Demonstrate proficiency in scanning operations -- The student will be able to:
- 21.01 Identify scanner hardware and its basic components and operations.
- 21.02 Identify basic scanner software, its uses and limitations.
- 21.03 Demonstrate appropriate scanner/program operations for continuous tone copy.
- 21.04 Demonstrate how to place scanned graphics/photos into existing page layout program.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 8**
Course Number: **8739080**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in vector based graphics and electronic pre-press operation.

22.0 Demonstrate understanding of a vector base graphics program -- The student will be able to:

- 22.01 Demonstrate how to log-on/boot-up vector-based graphics program and demonstrate a functional knowledge of commands/codes/menus/hand tools and procedures for their uses.
- 22.02 Demonstrate how to draw a design appropriate for a given job using a graphic program.
- 22.03 Demonstrate how to create a design using tints, fills and paint for a given job using a graphics program.
- 22.04 Demonstrate how to create a design using manipulated type (rotated, circled, extended, etc.) for a publication.
- 22.05 Demonstrate how to trace a drawing/photograph using a graphics program.
- 22.06 Demonstrate how to create a design/publication using electronic clip art.

23.0 Demonstrate proficiency in electronic pre-press operations -- The student will be able to:

- 23.01 Define the application of digital photography in electronic imaging.
- 23.02 List the capabilities and functions of image setters.
- 23.03 Identify and compare digital proofs.
- 23.04 Identify and compare networking systems.
- 23.05 Define the current systems/techniques for outputting files direct to plate material.
- 23.06 Demonstrate an understanding of the PostScript page description language.
- 23.07 Demonstrate how to compare the leading operating systems in performance, use and capabilities.
- 23.08 Define storage guidelines and limitations.
- 23.09 List the advantages and disadvantages of different storage media, such as syquest, optical, etc.
- 23.10 List the use and capabilities of storage devices for electronic imaging work, transport and storage.
- 23.11 Describe the strengths and weaknesses of TIFF, EPS, PICT and DCS in a Postscript environment.
- 23.12 Demonstrate how to translate files from DOS to Mac formats.
- 23.13 Demonstrate how to use a file compression utility for file transfer or storage.
- 23.14 Describe the differences between True Type and PostScript fonts.
- 23.15 Demonstrate how to use a telecommunications program and a modem to transfer files.
- 23.16 Demonstrate how to create a single color layout using clip art.
- 23.17 Demonstrate how to create a single color layout using work and turn.
- 23.18 Demonstrate how to change contrast using tint screens and shading techniques.

23.19 Demonstrate how to create a logo design on a computer and integrate it into a brochure design.
23.20 Demonstrate how to produce special effects type using a graphics application.
23.21 Demonstrate how to produce a job on the computer using electronic imposition.
23.22 Demonstrate how to create a job that incorporates electronic trapping.
23.23 Demonstrate how to produce a multicolor job that includes scans, text and spot color artwork.
23.24 Demonstrate how to prepare page layout files containing graphic images for remote output.
23.25 Demonstrate how to follow instructions to produce, modify or output files according to a customer supplied criteria.
23.26 Demonstrate how to use OCR software to capture text.
23.27 Demonstrate how to calibrate a desktop color scanner.
23.28 Demonstrate how to produce a color scan.
23.29 Demonstrate how to use a photo manipulation program to perform basic color correction and basic image cloning.
23.30 Demonstrate how to calibrate a color monitor.
23.31 Define how film processor variations affect final output.
23.32 Define quality control checks on the film processor.
23.33 Define the use and capabilities of storage devices for electronic imaging work transport and storage.
23.34 Define the strengths and weaknesses of TIFF, EPS, PICT and DCS in a Postscript environment.
23.35 Demonstrate how to translate files from DOS to Mac formats.
23.36 Use a file compression utility for file transfer or storage.
23.37 Define the differences between True Type and Postscript fonts.
23.38 Demonstrate how to use a telecommunications program and a modem to transfer files.
23.39 Demonstrate how to create a single color layout using clip art.
23.40 Demonstrate how to create a single color layout using work and turn.
23.41 Demonstrate how to change contrast using tint screens and shading techniques.
23.42 Demonstrate how to create logo design on a computer and integrate into a brochure design.
23.43 Demonstrate how to produce special effects type using a graphics application.
23.44 Demonstrate how to produce a job on the computer using electronic imposition.
23.45 Demonstrate how to create a job that incorporates electronic trapping.
23.46 Demonstrate how to produce a multicolor job that includes scans, text and spot color artwork.
23.47 Demonstrate how to prepare page layout files containing graphic images for remote output
23.48 Demonstrate how to follow instructions to produce, modify or output files according to customer supplied criteria.
23.49 Demonstrate how to use OCR software to capture text.
23.50 Demonstrate how to calibrate a desktop color scanner.
23.51 Demonstrate how to produce a color scan.
23.52 Demonstrate how to use a photo manipulation program to perform basic color correction and basic image cloning.
23.53 Demonstrate how to calibrate a color monitor.
23.54 Define how film processor variations affect final output.
23.55 Define quality control checks on the film processor.

24.0 Use information technology tools--The students will be able to:

- 24.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 24.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 24.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 24.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

25.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

- 25.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 25.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 25.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 25.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 9**
Course Number: **8739090**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in basic offset press operation.

26.0 Demonstrate proficiency in operation of basic offset press -- The student will be able to:
- 26.01 Identify the equipment and materials used in offset press operations, their parts and functions, and the safety rules relating to their operation.
- 26.02 Apply basic principles of offset lithography pertaining to physical and chemical properties of ink components (pigment, vehicle, and dryer).
- 26.03 Apply basic principles of offset lithography pertaining to dampening systems (ducted and continuous).
- 26.04 Apply basic principles of offset lithography pertaining to fountain solutions chemical components (acid, alkaline, and neutral).
- 26.05 Apply basic principles of offset lithography pertaining to ph-control and its effects on the lithographic process.
- 26.06 Apply basic principles of offset lithography pertaining to interrelationships upon the process of paper (coated and uncoated and various grades within).
- 26.07 Demonstrate how to determine grain directions of paper.
- 26.08 Demonstrate how to handle and jog paper stock (wire/felt, watermarks, carbonless sequence).
- 26.09 Demonstrate how to identify paper weight, coating and sizes.
- 26.10 Demonstrate how to identify paper problems, curling, dust, moisture, flaring, etc.
- 26.11 Apply basic principles of offset lithography pertaining to the interrelationships of textured or smooth paper; paper, plastic, metal plates, and conventional or compressible blankets.
- 26.12 Apply basic principles of offset lithography pertaining to ink and its drying properties in relation to fountain solution, plate and paper used (including effects of ink film thickness and drying time and set off; and problems associated with inappropriate use of spray powder).
- 26.13 Apply basic principles of plate preservation after presswork for long-time storage (use of gum Arabic and Asphaltum).
- 26.14 Demonstrate how to prepare a press for operation by reviewing job-ticket specifications and then selecting appropriate press and materials.
- 26.15 Demonstrate how to prepare a press for operation based on interrelationships of lithographic process.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Printing& Graphic Communications 10**
Course Number:	**8739091**
Course Credit:	**1**

Course Description:

This course is designed to provide instruction basic offset press operation.

26.0 Demonstrate proficiency in operation of basic offset press — The student should be able to:

26.16 Demonstrate how to mix fountain solution from concentrate
26.17 Demonstrate how to mix ink to color matching systems specifications (PMS, etc.).
26.18 Demonstrate how to introduce ink and fountain solution to press in proper sequence.
26.19 Demonstrate how to set up and adjust feeder to paper specifications (air blast, vacuum and choke).
26.20 Demonstrate how to set up and adjust register system to single sheet or stream fed, side guide, and head register.
26.21 Demonstrate how to set up and adjust delivery (chute or chain).
26.22 Demonstrate how to mount blanket (pack if necessary) and adjust to press specifications.
26.23 Demonstrate how to set impression cylinder to paper thickness and press specifications.
26.24 Demonstrate how to set and adjust ink and water rollers pressures to press specifications.
26.25 Demonstrate how to make-ready a press to assure ink and water balance for uniform coverage, volume and replenishment of ink, image position, cylinder pressure, and sheet registration.
26.26 Demonstrate how to make additions, deletions and repairs to offset plate.
26.27 Demonstrate how to inspect and evaluate final make-ready sheet to job-ticket specifications and obtain proof approval to run.
26.28 Demonstrate how to set spray powder.
26.29 Demonstrate how to produce required number of press sheets to job-ticket specifications.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 11**
Course Number: **8739092**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in basic offset press operation.

27.0 Demonstrate proficiency in operation of basic offset press — The student should be able to:
- 27.30 Demonstrate how to preserve plate for long-term storage.
- 27.31 Demonstrate how to perform press wash-up and roller treatment.
- 27.32 Demonstrate how to perform press maintenance to manufacturers' specifications.
- 27.33 Demonstrate how to apply basic principles of offset press operations with regard to work and turn, work and tumble and sheet wise printed products.
- 27.34 Demonstrate how to produce a tight register one-color project.
- 27.35 Demonstrate how to produce a tight register one or two-color, pre-collated carbonless project.
- 27.36 Demonstrate how to produce a two color tight register project.
- 27.37 Demonstrate how to print a two color job on a duplicator using a T-head.
- 27.38 Demonstrate how to produce a one or two color tight register envelope project.
- 27.39 Demonstrate how to produce a tight register one-color metallic ink project.
- 27.40 Demonstrate how to produce a tight register one or two color folding two sided project.
- 27.41 Demonstrate how to produce a multicolor tight register project.
- 27.42 Demonstrate an understanding and identify troubleshooting problems on a duplicator.
- 27.43 Define and identify direct imaging technologies.
- 27.44 Demonstrate how to clean and secure duplicator for down time.

28.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
- 28.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 28.02 Describe the effect of money management on personal and career goals. FL 3.0
- 28.03 Develop a personal budget and financial goals. FL3.1
- 28.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 28.05 Maintain financial records. FL3.3
- 28.06 Read and reconcile financial statements. FL3.4
- 28.07 Research, compare and contrast investment opportunities.

29.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 29.01 Describe the nature and types of business organizations. SY 1.0
- 29.02 Explain the effect of key organizational systems on performance and quality.
- 29.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0

29.04 Explain the impact of the global economy on business organizations. HE 2.0

30.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

30.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0

30.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1

30.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

30.04 Interpret and explain written organizational policies and procedures. ELR 2.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Printing & Graphic Communications 12**
Course Number: **8739093**
Course Credit: **1**

Course Description:

This course is designed to provide instruction in basic finishing and distribution.

27.0 Demonstrate proficiency in performing basic finishing and distribution competencies -- The student will be able to:
- 27.01 Demonstrate how to read and comprehend production information on a job jacket/ticket.
- 27.02 Demonstrate how to identify the equipment and materials used in finishing and distribution operations, their parts, functions, and safety rules relating to their operation.
- 27.03 Demonstrate how to apply basic math skills to the binding and distribution operations.
- 27.04 Demonstrate how to prepare folding dummy from press sheet in accordance with job ticket specifications and approved proof.
- 27.05 Demonstrate how to setup and operate folder in accordance with job ticket specifications and folding dummy
- 27.06 Demonstrate how to use folding equipment to produce single, gate and accordion folds.
- 27.07 Define and identify right angle folds.
- 27.08 Apply basic principles of finishing and distribution following folded bound signature impositions to allow for lips, trims and bleeds according to saddle and side-stitch binding method.
- 27.09 Define and identify slitting, perforating and scoring functions and equipment pertaining to folding operations.
- 27.10 Define how to use and setup cutters.
- 27.11 Demonstrate how to prepare rule-out of press sheet for finishing operations according to job ticket specifications and approved proof.
- 27.12 Demonstrate how to setup and operate cutter in accordance with rule-out.
- 27.13 Demonstrate how to square substrate.
- 27.14 Define and identify problems with substrate.
- 27.15 Define the proper maintenance procedures for paper cutters.
- 27.16 Define how to change the blade on a paper cutter.
- 27.17 Define and identify the most commonly used types of paper.
- 27.18 Demonstrate knowledge of paper types related to their printing, folding and binding characteristics.
- 27.19 Demonstrate how to hand-jog 8 1/2" x 11" substrate.
- 27.20 Demonstrate how to hand-jog 17" x 22" or larger substrate.
- 27.21 Demonstrate how to machine-jog substrate.
- 27.22 Define and identify off-line finishing systems.
- 27.23 Define the fundamentals of saddle stitching and perfect binding.
- 27.24 Define and identify the use of automated sorting and labeling equipment.
- 27.25 Define and identify mail class rates (bulk, presorted, etc.)

27.26 Define and identify the quality control methods for bar codes in relation to postal standards.
27.27 Define and identify embossing procedures and equipment.
27.28 List the common problems encountered in embossing.
27.29 Identify the components of case, spiral and perfect bound books.
27.30 Define and identify modern book binding equipment with hand binding techniques.
27.31 Demonstrate how to store and properly handle substrates.
27.32 Define and identify U-V coatings.
27.33 List the advantages and disadvantages of U-V coatings.
27.34 Demonstrate how to estimate the cost of materials and production for performing bindery operations; cutting, scoring, folding, packaging and coating.
27.35 Demonstrate how to setup and operate stitcher (side and saddle).
27.36 List the techniques used to control waste production and disposal in a modern bindery.
27.37 Define and identify spiral, comb and wire binding equipment and supplies.
27.38 Define tipping procedures.
27.39 Demonstrate how to perform preventive maintenance on binding and finishing equipment.
27.40 Demonstrate methods of counting substrate (machine, measurement, weight and rapid multiple-sheet manual counting by fives).
27.41 Define collating flat sheets.
27.42 Demonstrate how to setup and operate a paper drill for standard loose-leaf binder.
27.43 Define and identify packaging and shrink wrapping equipment.
27.44 Demonstrate how to package and identify completed job according to job specifications.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Journalism**
Program Type:	**Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	Secondary – Career Preparatory	
Program Number	8771100	
CIP Number	0609.999900	
Grade Level	9-12, 30, 31	
Standard Length	4 Credits	
Teacher Certification	**1006300 - Journalism I** ENGLISH 1 @2 @4 @8 @9 JOURNALISM 1 @2 @4 JR HI SCH @8 MG ENGLISH C COMM ART $7 $G TV PRO TEC $7 $G BUS ED $1 $2 $4 PHOTOG $7 $G	**8209510 - Digital Design 1** BUS ED 1 1 @2 BUS ED 1 @2 VOE @7 TEACH CBE @7 BUS DP @7 G ELECT DP @7 G CLERICAL @7 G SECRETAR@7 G STENOG @4 @7 G TEC ELEC $7 G COMP SCI @6 @2 COMM ART @7 G COMM ART $7 $G GRAPH ART $4 1 ART TECH $1 $2 JOURNALISM 1 @2 @4 JOURNALISM $1 $2 $4 PHOTOG $7 $G PRINTING ¢7 ¢G GEN SHOP $4 JR HI SCH $8 MG ENG $C TV PRO TECH $7 $G
	8771110 - Industrial Communications TV PRO TEC @ 7 G PHOTOG @ 7 G COMM ART @ 7 G ENGLISH $1 $2 $4 $8 $9 JR HI SCH $8 MG ENG $C BUS ED $1 $2 $4 JOURNALISM $1 $2 $4 ENGLISH 1 @2 @4 @8 @9 JOURNALISM 1 @2 @4	**8207110 – Web Design 1** BUS ED 1 1 @ 2 VOE @ 7 TEACH CBE @ 7 BUS DP @7 G ELECT DP @7 G CLERICAL @7 G SECRETAR @7 G STENOG @ 4 @7 G TEC ELEC $7 G COMP SCI @6 @2 COMM ART @7 G

Secondary – Career Preparatory	
CTSO	SkillsUSA
SOC Codes (all applicable)	27-3041
Facility Code	http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as writers and editors (SOC 27-3041). This program provides a medium whereby the student will be given the opportunity for practical hands-on experiences that incorporate academic skills into a real life situation.

The program familiarizes individuals with creative writing, script writing, graphic communications, desktop publishing, television production, photojournalism, and investigative reporting.

The presentation of subject matter should incorporate team teaching. Activities should utilize a rotational type format so that the student is exposed and reinforced academically and vocationally for each outcome.

Program Structure

This program is a planned sequence of instruction consisting of one Occupational Completion Point.

The following table illustrates the secondary program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
	1006300	Journalism I	1 Credit	27-3041	2
	8771110	Industrial Communications	1 Credit		2
	8209510	Digital Design 1	1 Credit		2
A	8207110	Web Design 1	1 Credit		2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education.

Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate fundamental skills in the use of the writing process for varied journalistic media.
02.0 Demonstrate fundamental use of production skills (e.g., layout design, ad design, storyboarding) for varied mass communication documents or electronic media.
03.0 Demonstrate awareness of the history and evolution of journalism and the responsible and ethical use of information (e.g., First Amendment, copyright, intellectual freedom).
04.0 Demonstrate awareness of ethical issues (e.g., manipulation, misrepresentation, fraud) when addressing social, cultural, and political issues through print and nonprint photojournalism.
05.0 Demonstrate fundamental use of organization and management techniques related to production of journalistic media (e.g., team building, leadership, business skills, time management, task organization).
06.0 Demonstrate fundamental use of technology for research, production, and dissemination of journalistic media.
07.0 Analyze varied journalistic documents or electronic media.
08.0 Demonstrate awareness of varied careers in journalism.
09.0 Produce writing appropriate to journalistic media.
10.0 Organize and utilize_production modes appropriate to journalistic media, including desktop publishing, keyboarding, photography, commercial art, and television production.
11.0 Plan a set for television production.
12.0 Perform lighting activities for a planned production.
13.0 Demonstrate correct use of basic equipment used in television production.
14.0 Demonstrate ability to identify different types of script copy.
15.0 Demonstrate ability to write script in broadcast style.
16.0 Perform electronic/desktop-publishing operations.
17.0 Demonstrate knowledge of electronic/desktop publishing concepts.
18.0 Perform mechanical creative support operations.
19.0 Participate in work-based learning experiences.
20.0 Demonstrate proficiency in computer skills.
21.0 Demonstrate knowledge of digital publishing concepts.
22.0 Perform decision-making activities.
23.0 Perform layout, design, and measurement activities.
24.0 Demonstrate proficiency in digital publishing operations
25.0 Demonstrate proficiency in digital imaging.
26.0 Perform e-mail activities.
27.0 Demonstrate proficiency using operating systems.
28.0 Demonstrate proficiency navigating the internet, intranet, and the WWW.
29.0 Demonstrate proficiency using HTML commands.
30.0 Demonstrate proficiency in page design applicable to the WWW.
31.0 Develop an awareness of internet/intranet tools.
32.0 Demonstrate mathematics knowledge and skills.
33.0 Demonstrate science knowledge and skills.
34.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.

35.0 Demonstrate language arts knowledge and skills.
36.0 Solve problems using critical thinking skills, creativity and innovation.
37.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
38.0 Use information technology tools.
39.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
40.0 Demonstrate personal money-management concepts, procedures, and strategies.
41.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
42.0 Describe the importance of professional ethics and legal responsibilities.
43.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Journalism**
Course Number:	**1006300**
Course Credit:	**1**

Course Description:

This course is designed to develop basic entry-level skills required for careers in the writing and editing industry.

Basic Assumptions for Language Arts Education:

- Reading, writing, speaking, listening, and viewing competencies are integrated throughout students' learning experiences.
- Benchmarks for the Sunshine State Standards are repeated as needed in course sequences. As students progress from one course to the next, increases should occur in the complexity of materials and tasks and in the students' independence in the application of skills and strategies.
- Learning tasks and materials accommodate the individual needs of students.
- Technology is available for students to develop competencies in the language arts.

A. Major Concepts/Content. The purpose of this course is to enable students to develop fundamental skills in the production of print or electronic journalistic media.

The content should include, but not be limited to, the following:

-writing processes

-production skills for varied media

-history and ethics of journalism

-applications and issues in photojournalism

-organization and management techniques

-technology for research, production, and dissemination

-analysis of journalistic media

- careers in journalism

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.
Course student performance standards must be adopted by the district, and they must reflect appropriate Sunshine State Standards benchmarks.

B. Special Note. Hands-on activities are integral to this course. This course may require students to participate in activities beyond the school day.

C. Course Requirements. These requirements include, but are not limited to, the benchmarks from the Sunshine State Standards that are most relevant to this course.

Benchmarks correlated with a specific course requirement may also be addressed by other course requirements as appropriate. The benchmarks printed in regular type are required for this course. The portions printed in *italic type* are not required for this course. Some requirements in this course are not addressed in the Sunshine State Standards.

After successfully completing this course, the student will:

01.0 Demonstrate fundamental skills in the use of the writing process for varied journalistic media.

LA.A.2.4.4	locate, gather, analyze, and evaluate written information for a variety of purposes, including research projects, real-world tasks, and self-improvement.
LA.A.2.4.6	select and use appropriate study and research skills and tools according to the type of information being gathered or organized, including almanacs, government publications, microfiche, news sources, and information services.
LA.A.2.4.7	analyze the validity and reliability of primary source information and use the information appropriately. LA.A.2.4.8 synthesize information from multiple sources to draw conclusions.
LA.B.1.4.1	select and use appropriate prewriting strategies, such as brainstorming, graphic organizers, and outlining.
LA.B.1.4.2	draft and revise writing that

- is focused, purposeful, and reflects insight into the writing situation;
- has an organizational pattern that provides for a logical progression of ideas;
- has effective use of transitional devices that contribute to a sense of completeness;
- has support that is substantial, specific, relevant, and concrete;
- demonstrates a commitment to and involvement with the subject;
- uses creative writing strategies as appropriate to the purpose of the paper;
- demonstrates a mature command of language with precision of expression;
- has varied sentence structure; and
- has few, if any, convention errors in mechanics, usage, punctuation, and spelling.
  LA.B.1.4.3 produce final documents that have been edited for correct spelling;
- correct punctuation, including commas, colons, and common use of semicolons;
- correct capitalization;
- correct sentence formation;
- correct instances of possessives, subject/verb agreement, instances of noun/pronoun agreement, and the intentional use of fragments for effect; and
- correct formatting that appeals to readers, including appropriate use of a variety of graphics, tables, charts, and illustrations in both standard and innovative forms.

LA.B.2.4.3 write fluently for a variety of occasions, audiences, and purposes, making appropriate choices regarding style, tone, level of detail, and organization.

LA.D.1.4.2 make appropriate adjustments in language use for social, academic, and life situations, demonstrating sensitivity to gender and cultural bias.

02.0 Demonstrate fundamental use of production skills (e.g., layout design, ad design, storyboarding) for varied mass communication documents or electronic media.

LA.B.2.4.2 organize information using appropriate systems. LA.D.2.4.3 recognize production elements that contribute to the effectiveness of a specific medium.

03.0 Demonstrate awareness of the history and evolution of journalism and the responsible and ethical use of information (e.g., First Amendment, copyright, intellectual freedom).

LA.D.2.4.6 understand that laws control the delivery and use of media to protect the rights of authors and the rights of media owners.

04.0 Demonstrate awareness of ethical issues (e.g., manipulation, misrepresentation, fraud) when addressing social, cultural, and political issues through print and nonprint photojournalism.

LA.C.2.4.1 determine main concept and supporting details in order to analyze and evaluate nonprint media messages.

LA.C.2.4.2 understand factors that influence the effectiveness of nonverbal cues used in nonprint media, such as the viewer's past experiences and preferences, and the context in which the cues are presented.

LA.E.2.4.4 understand the use of images and sounds to elicit the reader's emotions in both fiction and nonfiction.

05.0 Demonstrate fundamental use of organization and management techniques related to production of journalistic media (e.g., team building, leadership, business skills, time management, task organization).

AT.1.1.4.2 create a collaborative and comprehensive plan which addresses specific events, products, or projects either personally or for the work place.

AT.2.1.4.2 analyze the managerial skills necessary for decision making in different work-related situations.

AT.9.1.4.2 demonstrate the ability to cooperatively work in various settings across diverse populations.

LA.C.1.4.1 select and use appropriate listening strategies according to the intended purpose, such as solving problems, interpreting and evaluating the techniques and intent of presentation, and taking action in career-related situations.

LA.C.1.4.3 use effective strategies for informal and formal discussions, including listening actively and reflectively, connecting to and building on the ideas of a previous speaker, and respecting the viewpoints of others.

LA.C.3.4.4 apply oral communication skills to interviews, group presentations, formal presentations, and impromptu situations.

06.0 Demonstrate fundamental use of technology for research, production, and dissemination of journalistic media.

LA.B.2.4.4	select and use a variety of electronic media, such as the Internet, information services, and desktop publishing software programs, to create, revise, retrieve, and verify information.

07.0 Analyze varied journalistic documents or electronic media.

LA.A.2.4.5	identify devices of persuasion and methods of appeal and their effectiveness.
LA.C.1.4.4	identify bias, prejudice, or propaganda in *oral* messages.
LA.D.2.4.1	understand specific ways in which language has shaped the reactions, perceptions, and beliefs of the local, national, and global communities.
LA.D.2.4.2	understand the subtleties of literary devices and techniques in the comprehension and creation of communication.
LA.D.2.4.5	critically analyze specific elements of mass media with regard to the extent to which they enhance or manipulate information.

08.0 Demonstrate awareness of varied careers in journalism

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Industrial Communications**
Course Number: **8771110**
Course Credit: **1**

Course Description:

This course is designed to develop basic entry-level skills required for careers in the communications industry.

09.0 Produce writing appropriate to journalistic media -- the student will be able to:
  09.07 Write headlines and captions for a variety of journalistic activities.
  09.08 Identify the "who, what, when, where, and how" components of a news story.
  09.09 Write a news story in acceptable journalistic style.
  09.10 Write a sports article using news style and appropriate jargon.
  09.11 Write an editorial of commendation, condemnation, or both, offering observations and/or criticisms.
  09.12 Write a feature story that adheres to acceptable column style.
  09.13 Describe how copyright law pertains to professional and educational use of other writers' materials.
  09.14 Write copy for a variety of journalistic media (television, radio, magazines, etc.)

10.0 Organize and utilize production modes appropriate to journalistic media, including desktop publishing, keyboarding, photography, commercial art, and television production -- the student will be able to:
  10.07 Identify the principles of layout design.
  10.08 Identify the basic elements necessary to produce a good photograph.
  10.09 Describe how the use of photograph or photograph idea extends the written word.
  10.10 Identify equipment appropriate for production of a variety of journalistic media.
  10.11 Identify principles of advertising.
  10.12 Identify proofreading symbols.

11.0 Plan a set for television production -- the student will be able to:
  11.07 Prepare television set for a planned production.
  11.08 Draw and design a set plan to scale.
  11.09 Select and arrange state props.
  11.10 Utilize hand tools to construct scene components.
  11.11 Inspect and repair scenery as needed.

12.0 Perform lighting activities for a planned production -- the student will be able to:
  12.07 Describe types of lighting fixtures.
  12.08 Identify parts of lighting fixtures.
  12.09 Perform special effects lighting.
  12.10 Set-up appropriate lighting for a production.
  12.11 Describe functions of master lighting panel and dimmer board.
  12.12 Operate master lighting panel to dimmer board.
  12.13 Analyze lighting needs for production.

13.0 Demonstrate correct use of basic equipment used in television production -- the student will be able to:
  13.07 Load, record and play a videotape.
  13.08 Demonstrate the steps necessary to set up, turn on, and operate a video camera.
  13.09 Demonstrate picture composition.
  13.10 Identify, select and demonstrate use of an appropriate microphone.
  13.11 Identify the qualities of a good audio track.
  13.12 Demonstrate basic television lighting.
  13.13 Explain the care, storage and use of television hardware and software.

14.0 Demonstrate ability to identify different types of script copy -- the student will be able to:
  14.07 Identify scripts by format.
  14.08 Define terminology used in broadcast script writing.

15.0 Demonstrate ability to write script in broadcast style -- the student will be able to:
  15.07 Plan and produce a storyboard.
  15.08 Specify steps leading to broadcast scripts.
  15.09 Write broadcast scripts.

16.0 Perform electronic/desktop publishing operations -- the student will be able to:
  16.07 Identify machine specifications and functions.
  16.08 Prepare computer printer and scanner for operations.

17.0 Demonstrate knowledge of electronic/desktop publishing concepts -- the student will be able to:
  17.07 Identify the skills needed by an electronic desktop publisher.
  17.08 Identify significant developments in the electronic/desktop publishing industry.
  17.09 Define commonly used terms in graphic communications.
  17.10 Identify characteristics of paper.
  17.11 Identify software used in electronic/desktop publishing.

18.0 Perform mechanical creative support operations -- the student will be able to:
  18.07 Identify characteristics of type, type families, type series, and type styles.
  18.08 Identify elements of design.
  18.09 Copy, fit, and markup (specify type sizes and styles).
  18.10 Paste up mechanical elements electronically.
  18.11 Check and compare completed mechanical to comprehensive layout for final proofing.
  18.12 Prepare rough layout design.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Design 1**
Course Number: **8209510**
Course Credit: **1**

Course Description:

This course is designed to develop basic entry-level skills required for careers in the digital publishing industry. The content includes computer skills; digital publishing concepts and operations; layout, design, and measurement activities; decision-making activities; and digital imaging.

19.0 Participate in work-based learning experiences -- the student will be able to:
- 19.07 Discuss the use of technology in a digital publishing environment.

20.0 Demonstrate proficiency in computer skills -- the student will be able to:
- 20.07 Identify all computer parts (e.g., RAM, ROM).
- 20.08 Demonstrate an understanding of all functions of a computer.
- 20.09 Utilize appropriate font management techniques (e.g., True Type, Postscript, install and remove fonts).
- 20.10 Perform storage management (e.g., hard drive, floppy disk).
- 20.11 Perform maintenance of computers and peripherals.

21.0 Demonstrate knowledge of digital publishing concepts -- the student will be able to:
- 21.07 Identify the skills needed by a digital designer.
- 21.08 Define commonly used terms in graphic communications.
- 21.09 Identify characteristics of paper.
- 21.10 Identify different kinds of color (e.g., spot, process).
- 21.11 Identify software used in digital publishing.
- 21.12 Demonstrate knowledge of copyright laws.

22.0 Perform decision-making activities -- the student will be able to:
- 22.07 Determine work priorities.
- 22.08 Evaluate information to be used and choose relevant material.
- 22.09 Determine the audience.
- 22.10 Demonstrate an understanding of various advertising mediums.
- 22.11 Recognize and maintain ethical standards.

23.0 Perform layout, design, and measurement activities -- the student will be able to:
- 23.07 Identify characteristics of type, type families, type series, and type styles.
- 23.08 Paste up mechanical elements electronically.
- 23.09 Prepare rough layout designs.
- 23.10 Copycat and markup using type sizes and styles.
- 23.11 Identify elements of design.

24.0 Demonstrate proficiency in digital publishing operations -- the student will be able to:
- 24.07 Key with speed and accuracy to meet industry standards.
- 24.08 Complete projects using a variety of fonts, sizes, leading, and alignments.

24.09 Output projects using a variety of devices (e.g., printers, image setters).
24.10 Design with type using kerning, tracking, horizontal/vertical scale, baseline shift, etc.
24.11 Produce projects using table and indents.
24.12 Produce projects using white space.
24.13 Assemble multi-page documents.
24.14 Create documents that use master pages.
24.15 Use a variety of styles to produce effective layouts.
24.16 Produce a document using printer and reader spreads.
24.17 Use publishing software to create a pre-press profile.
24.18 Produce a variety of designs using layout/paste-up software.

25.0 Demonstrate proficiency in digital imaging -- the student will be able to:
25.07 Demonstrate proper use of a scanner/slide scanner.
25.08 Proofread electronically and manually.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Web Design 1**
Course Number: **8207110**
Course Credit: **1**

Course Description:

This course is designed to provide a basic overview of the internet, intranet, and the World Wide Web (www). The content includes operating systems; basic html commands; navigation of the internet, intranet, and web; and web page design.

19.0 Participate in work-based learning experiences -- the student will be able to:
- 19.01 Participate in work-based learning experiences in a web design services environment.
- 19.02 Discuss the use of technology in a web design services environment.
- 19.03 Compare and contrast the software applications used in a web design services environment.

22.0 Perform decision making activities -- the student will be able to:
- 22.01 Determine work priorities.
- 22.02 Evaluate and select appropriate software packages to complete assigned tasks.
- 22.03 Evaluate information to be used and choose relevant material.
- 22.04 Determine the audience.
- 22.05 Compare and select appropriate multimedia tools.

26.0 Perform e-mail activities -- the student will be able to:
- 26.01 Describe e-mail capabilities and functions.
- 26.02 Create and send e-mail messages with attachments.
- 26.03 Reply to and forward e-mail messages.
- 26.04 Organize and manage e-mail messages.
- 26.05 Utilize all applicable e-mail options and functions.
- 26.06 Use the internet to perform e-mail activities.
- 26.07 Define the standards used by internet/intranet e-mail (e.g., POP3, MIME).
- 26.08 Describe the issues involved in sending and receiving documents as e-mail attachments.
- 26.09 Identify privacy issues in the employee/employer relationship (e.g., avoid libel, spam, personal usage).

27.0 Demonstrate proficiency using operating systems -- the student will be able to:
- 27.01 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
- 27.02 Describe the difference between relative and absolute path commands.
- 27.03 Demonstrate a working knowledge of standard file formats.
- 27.04 Demonstrate proficiency with help references.

28.0 Demonstrate proficiency navigating the internet, intranet, and the WWW -- the student will be able to:
- 28.01 Identify and describe web terminology.
- 28.02 Describe the history of the internet and intranet.

28.03 Describe the difference between a client and a server.
28.04 Describe the difference between the internet, intranet, and WWW.
28.05 Describe the different methods by which information may be accessed on the internet/intranet (e.g., browser, FTP, gopher, telnet, veronica).
28.06 List the available resources and services on the internet (e.g., electronic commerce, personal, government, business, etiquette, education, distance learning).
28.07 Locate information on the internet/intranet using a web browser.
28.08 Copy information from the internet/intranet, save, and print using a web browser.
28.09 Demonstrate proficiency in using the basic features of GUI browsers (e.g., setting bookmarks, basic configurations, e-mail configurations, address book).
28.10 Define universal resource locators (URL's associated protocols (e.g., .COM, .ORG, .EDU, .GOV, .NET, .MIL).
28.11 Identify and use search engines to locate information.
28.12 Describe the various ways of communicating on the internet/intranet (e.g., e-mail, forums, IRC, chat, listserv, USENET, moos, etc.).
28.13 Describe and observe internet/intranet ethics and copyright laws.
28.14 Identify methods to protect personal copyright.

29.0 Demonstrate proficiency using HTML commands -- the student will be able to:
29.01 Identify elements of a web page.
29.02 Describe individual web page layouts and content (e.g., writing for the web, web structure).
29.03 Define basic HTML terminology.
29.04 Analyze html source code developed by others.
29.05 Create a web page using basic html tags (e.g., links, lists, character styles, text alignment, tables).
29.06 Use storyboarding techniques for subsequent web pages (e.g., linear, hierarchical).
29.07 Add graphics to web pages.
29.08 Edit and test html documents for accuracy and validity.
29.09 Use basic functions of HTML editors and converters.
29.10 Use basic functions of WYSIWYG editors.

30.0 Demonstrate proficiency in page design applicable to the WWW -- the student will be able to:
30.01 Develop an awareness of acceptable web page design, including index pages in relation to the rest of the web site.
30.02 Describe and apply color theory as it applies to web page design (e.g., background and text color).
30.03 Identify and convert graphic formats.
30.04 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD ROMS).
30.05 Use image design software to create and edit images.

31.0 Develop an awareness of internet/intranet tools -- the student will be able to:
31.01 Describe the various hardware components used on the internet/intranet.
31.02 Demonstrate the use of compression programs.
31.03 Demonstrate the use of backups.

32.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 32.07 Demonstrate knowledge of arithmetic operations. AF3.2
- 32.08 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 32.09 Construct charts/tables/graphs using functions and data. AF3.5

33.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 33.07 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 33.08 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

34.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 34.07 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 34.08 Locate, organize and reference written information from various sources. CM 3.0
- 34.09 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 34.10 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 34.11 Apply active listening skills to obtain and clarify information. CM 7.0
- 34.12 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 34.13 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

35.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 35.07 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 35.08 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 35.09 Present information formally and informally for specific purposes and audiences. AF2.9

36.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 36.07 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 36.08 Employ critical thinking and interpersonal skills to resolve conflicts . PS 2.0
- 36.09 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 36.10 Conduct technical research to gather information necessary for decision-making. PS 4.0

37.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
- 37.07 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 37.08 Explain emergency procedures to follow in response to workplace accidents.

37.09 Create a disaster and/or emergency response plan.

38.0 Use information technology tools--The students will be able to:
38.07 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
38.08 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
38.09 Employ computer operations applications to access, create, manage, integrate, and store information . IT 3.0
38.10 Employ collaborative/groupware applications to facilitate group work. IT 4.0

39.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
39.07 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
39.08 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
39.09 Conduct and participate in meetings to accomplish work tasks. LT 4.0
39.10 Employ mentoring skills to inspire and teach others. LT 5.0

40.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
40.07 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
40.08 Describe the effect of money management on personal and career goals. FL 3.0
40.09 Develop a personal budget and financial goals. FL3.1
40.10 Complete financial instruments for making deposits and withdrawals. FL3.2
40.11 Maintain financial records. FL3.3
40.12 Read and reconcile financial statements. FL3.4
40.13 Research, compare and contrast investment opportunities.

41.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
41.07 Describe the nature and types of business organizations. SY 1.0
41.08 Explain the effect of key organizational systems on performance and quality.
41.09 List and describe quality control systems and/or practices common to the workplace. SY 2.0
41.10 Explain the impact of the global economy on business organizations. HE 2.0

42.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
42.07 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
42.08 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
42.09 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
42.10 Interpret and explain written organizational policies and procedures. ELR 2.0

43.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

43.07 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
43.08 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
43.09 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
43.10 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
43.11 Evaluate and compare employment opportunities that match career goals. ECD 6.0
43.12 Identify and exhibit traits for retaining employment. ECD 7.0
43.13 Identify opportunities and research requirements for career advancement. ECD 8.0
43.14 Research the benefits of ongoing professional development. ECD 9.0
43.15 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Commercial Photography Technology**
Program Type:	**Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8772000	I480204
CIP Number	0648.020400	0648.020400
Grade Level	9-12, 30, 31	30, 31
Standard Length	11 Credits	1650 Hours
Teacher Certification	PHOTOG @7 G	PHOTOG @7 G
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	51-9131 27-4021	51-9131 27-4021
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for employment as photographers', commercial photographers (SOC 27-4021).

The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, and the use of cameras and laboratory film-processing techniques in portrait, commercial and industrial applications with emphasis on composition and color dynamics, contact printing, enlarging and developing film, and use, care, and maintenance of photographic equipment.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the commercial photography industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of one program, four Occupational Completion Points

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
	PGY0180	Photographic Imaging Specialist - 1	250 Hours	51-9131
A	PGY0181	Photographic Imaging Specialist - 2	250 Hours	51-9131
B	PGY0182	Photography Specialist/Lab Technician	200 Hours	51-9131
	PGY0183	Portrait Photographer 1	250 Hours	27-4021
C	PGY0184	Portrait Photographer 2	250 Hours	27-4021
D	PGY0185	Commercial Photographer	450 Hours	27-4021

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
	8772010	Commercial Photography Technology 1	1 Credit		2
	8772020	Commercial Photography Technology 2	1 Credit		2
	8772030	Commercial Photography Technology 3	1 Credit		2
A	8772040	Commercial Photography Technology 4	1 Credit	51-9131	2
	8772050	Commercial Photography Technology 5	1 Credit		2
	8772060	Commercial Photography Technology 6	1 Credit		2
B	8772070	Commercial Photography Technology 7	1 Credit	51-9131	2
	8772080	Commercial Photography Technology 8	1 Credit		2
	8772090	Commercial Photography Technology 9	1 Credit		2
C	8772091	Commercial Photography Technology 10	1 Credit	27-4021	2
D	8772092	Commercial Photography Technology 11	1 Credit	27-4021	2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C. Other organizations to consider: National Technical Honor Society; Florida Scholastic Press Association.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Perform laboratory skills.
02.0 Manage a photographic business.
03.0 Demonstrate mathematics knowledge and skills.
04.0 Demonstrate science knowledge and skills.
05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
06.0 Demonstrate language arts knowledge and skills.
07.0 Solve problems using critical thinking skills, creativity and innovation.
08.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
09.0 Control exposures (35mm camera).
10.0 Take basic photographs (35mm camera).
11.0 Finish photographs.
12.0 Apply lighting techniques.
13.0 Reproduce photographic media.
14.0 Demonstrate appropriate communication skills.
15.0 Explain the importance of employability and entrepreneurship skills.
16.0 Reproduce photographic media.
17.0 Operate various format cameras.
18.0 Process color images.
19.0 Procure color photographs.
20.0 Use information technology tools.
21.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
22.0 Demonstrate personal money-management concepts, procedures, and strategies
23.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
24.0 Describe the importance of professional ethics and legal responsibilities
25.0 Take studio photographs.
26.0 Produce media presentations.
27.0 Use digital imaging.

July 2010

Florida Department of Education
Student Performance Standards

Program Title: Commercial Photography Technology
PSAV Number: I480204

Course Number: PGY0180
Occupational Completion Point: A
Photographic Imaging Specialist 1 – 250 Hours – SOC Code 51-9131

01.0 Perform laboratory skills -- The student will be able to:
- 01.01 Mix developers and other chemicals.
- 01.02 Hand-process black and white film.
- 01.03 Print black and white photographs.
- 01.04 Process black and white paper.
- 01.05 Utilize modern processing machines for color printing.

02.0 Manage the photographic business -- The student will be able to:
- 02.01 Apply communication skills.
- 02.02 Apply human relation skills.
- 02.03 Set rates for photographic work.
- 02.04 Maintain shop records and files.
- 02.05 Develop effective advertising.
- 02.06 Maintain presentational portfolio

03.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 03.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 05.02 Locate, organize and reference written information from various sources. CM 3.0
- 05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 05.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

06.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
  06.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
  06.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
  06.03 Present information formally and informally for specific purposes and audiences. AF2.9

07.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
  07.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
  07.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
  07.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
  07.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

08.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
  08.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
  08.02 Explain emergency procedures to follow in response to workplace accidents.
  08.03 Create a disaster and/or emergency response plan.

Course Number: PGY0181
Occupational Completion Point: A
Photographic Imaging Specialist 2 – 250 Hours – SOC Code 51-9131

09.0 Control exposures (35mm camera) -- The student will be able to:
  09.01 Set appropriate f-stop and shutter speeds.
  09.02 Select appropriate film type.

10.0 Take basic photographs (35mm camera) -- The student will be able to:
  10.01 Apply camera care and maintenance principles.
  10.02 Compose photographs.
  10.03 Take still photographs.
  10.04 Take action photographs.

11.0 Finish photographs -- The student will be able to:
  11.01 Mount photographs.
  11.02 Mat/frame photographs.

12.0 Apply lighting techniques -- The student will be able to:
  12.01 Take photographs with available light.
  12.02 Take photographs with electronic strobe.
  12.03 Take photographs with photo-flood lighting.

13.0 Reproduce photographic media -- The student will be able to:
  13.01 Copy prints.

14.0 Demonstrate appropriate communication skills -- The student will be able to:

14.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
14.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
14.03 Read and follow written and oral instructions.
14.04 Answer and ask questions coherently and concisely.
14.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
14.06 Demonstrate appropriate telephone/communication skills.

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
15.06 Identify and exhibit traits for retaining employment. ECD 7.0
15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
15.08 Research the benefits of ongoing professional development. ECD 9.0
15.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: PGY0182
Occupational Completion Point: B
Photography Specialist/Lab Technician – 200 Hours – SOC Code 51-9131

16.0 Reproduce photographic media -- The student will be able to:
16.01 Scan Transparencies
16.02 Scan internegatives

17.0 Operate various format cameras -- The student will be able to:
17.01 Use view cameras.

18.0 Process color images -- The student will be able to:
18.01 Hand process color negatives and transparencies. (optional)
18.02 Process color negatives and transparencies. (optional)
18.03 Down load images to a computer.
18.04 Save images in a computer to a storage device.
18.05 Utilize modern processing machines for color printing

19.0 Procure color photographs -- The student will be able to:
19.01 Process color paper. (optional)
19.02 Print color negatives. (optional)
19.03 Print color negatives using color analyzer. (optional)
19.04 Purchase color mediums.
19.05 Calibrate a computer monitor.
19.06 Analyze a color print for correct color and contrast.
19.07 Utilize modern processing machines for color printing

20.0 Use information technology tools--The students will be able to:

20.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
20.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
20.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
20.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

21.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

21.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
21.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
21.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
21.04 Employ mentoring skills to inspire and teach others. LT 5.0

22.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

22.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
22.02 Describe the effect of money management on personal and career goals. FL 3.0
22.03 Develop a personal budget and financial goals. FL3.1
22.04 Complete financial instruments for making deposits and withdrawals. FL3.2
22.05 Maintain financial records. FL3.3
22.06 Read and reconcile financial statements. FL3.4
22.07 Research, compare and contrast investment opportunities.

23.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

23.01 Describe the nature and types of business organizations. SY 1.0
23.02 Explain the effect of key organizational systems on performance and quality.
23.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
23.04 Explain the impact of the global economy on business organizations. HE 2.0

24.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

24.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
24.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
24.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
24.04 Interpret and explain written organizational policies and procedures. ELR 2.0

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0

15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
15.06 Identify and exhibit traits for retaining employment. ECD 7.0
15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
15.08 Research the benefits of ongoing professional development. ECD 9.0
15.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: PGY0183
Occupational Completion Point: C
Portrait Photographer 1 – 250 Hours – SOC Code 27-4021

17.0 Operate various format cameras -- The student will be able to:
  17.02 Use 2¼ format cameras.

25.0 Take studio photographs -- The student will be able to:
  25.01 Take portraits.

27.0 Use digital imaging -- The student will be able to:
  27.01 Use basic photographic computer skills
  27.02 Use a professional imagining program.
  27.03 Use a flatbed and film scanner.
  27.04 Output photographic quality images using a digital printer.
  27.05 Use digital camera.

Course Number: PGY0184
Occupational Completion Point: C (Cont.)
Portrait Photographer 2 – 250 Hours – SOC Code 27-4021

17.0 Operate various format cameras -- The student will be able to:
  17.02 Use 2¼ format cameras.

25.0 Take studio photographs -- The student will be able to:
  25.01 Take portraits.

27.0 Use digital imaging -- The student will be able to:
  27.01 Use basic photographic computer skills
  27.02 Use a professional imagining program.
  27.03 Use a flatbed and film scanner.
  27.04 Output photographic quality images using a digital printer.
  27.05 Use digital camera.

Course Number: PGY0185
Occupational Completion Point: D
Commercial Photographer – 450 Hours – SOC Code 27-4021

25.0 Take studio photographs -- The student will be able to:
  25.02 Take commercial photographs.

26.0 Produce media presentations -- The student will be able to:
  26.02 Prepare script for slide presentation.
  26.03 Shoot slides for slide presentation.

26.04 Produce slide presentation.
26.05 Prepare script for video presentation.
26.06 Shoot video tape.
26.07 Produce video presentation.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 1**
Course Number: **8772010**
Course Credit: **1**

Course Description:

This course is one in a series of eleven courses. This is the introductory course in 35mm Camera Operation. The use of various light meters in the 35mm cameras as well as hand held light meters will be reviewed. Focusing systems are considered. Film types are compared to lighting conditions for proper exposures. Film loading and unloading are considered. The reciprocal value of apertures and shutter speeds are examined.

01.0 Perform laboratory skills -- The student will be able to:
- 01.01 Mix developers and other chemicals.
- 01.02 Hand-process black and white film.
- 01.03 Print black and white photographs.
- 01.04 Process black and white paper.

02.0 Manage the photographic business -- The student will be able to:
- 02.01 Apply communication skills.
- 02.02 Apply human relation skills.
- 02.03 Set rates for photographic work.
- 02.04 Maintain shop records and files.
- 02.05 Maintain presentational portfolio

03.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 03.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 05.02 Locate, organize and reference written information from various sources. CM 3.0
- 05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 05.05 Apply active listening skills to obtain and clarify information. CM 7.0

05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

06.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
06.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
06.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
06.03 Present information formally and informally for specific purposes and audiences. AF2.9

07.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
07.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
07.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
07.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
07.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

08.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
08.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
08.02 Explain emergency procedures to follow in response to workplace accidents.
08.03 Create a disaster and/or emergency response plan.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 2**
Course Number: **8772020**
Course Credit: **1**

Course Description:

This course is one in a series of eleven courses. The guidelines of composing within the photographic frame are discussed. Posing one or more subjects for portraiture in the studio is considered. The guidelines for setting up a still life are introduced. Other rules for arranging groups, determining format, color harmony, and perspective are introduced.

09.0 Control exposures (35mm camera) -- The student will be able to:
- 09.01 Set appropriate f-stop and shutter speeds.
- 09.02 Select appropriate film type.

10.0 Take basic photographs (35mm camera) -- The student will be able to:
- 10.01 Apply camera care and maintenance principles.
- 10.02 Compose photographs.
- 10.03 Take still photographs.
- 10.04 Take action photographs.

11.0 Finish photographs -- The student will be able to:
- 11.01 Mount photographs.
- 11.02 Mat/frame photographs.

12.0 Apply lighting techniques -- The student will be able to:
- 12.01 Take photographs with available light.
- 12.02 Take photographs with electronic strobe.
- 12.03 Take photographs with photo-flood lighting.

13.0 Reproduce photographic media -- The student will be able to:
- 13.01 Copy prints.

14.0 Demonstrate appropriate communication skills -- The student will be able to:
- 14.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
- 14.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
- 14.03 Read and follow written and oral instructions.
- 14.04 Answer and ask questions coherently and concisely.
- 14.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
- 14.06 Demonstrate appropriate communication skills.

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 15.01 Identify and demonstrate positive work behaviors needed to be employable.ECD 1.0

15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
15.06 Identify and exhibit traits for retaining employment. ECD 7.0
15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
15.08 Research the benefits of ongoing professional development. ECD 9.0
15.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 3**
Course Number: **8772030**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. This course is designed to expose the student to lighting techniques the coping of prints and employability skills.

02.0 Manage the photographic business -- The student will be able to:
- 02.01 Apply communication skills.
- 02.02 Apply human relation skills.
- 02.03 Set rates for photographic work.
- 02.04 Maintain shop records and files.
- 02.05 Maintain presentational portfolio

12.0 Apply lighting techniques -- The student will be able to:
- 12.01 Take photographs with available light.
- 12.02 Take photographs with electronic strobe.
- 12.03 Take photographs with photo-flood lighting.

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 15.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 15.08 Research the benefits of ongoing professional development. ECD 9.0
- 15.09 Examine and describe entrepreneurship opportunities as a career planning option.

16.0 Reproduce photographic media -- The student will be able to:
- 16.01 Copy prints

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 4**
Course Number: **8772040**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. This course is designed to expose the student in advanced instruction in the use of commercial cameras and reproduce photographic media.

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 15.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 15.08 Research the benefits of ongoing professional development. ECD 9.0
- 15.09 Examine and describe entrepreneurship opportunities as a career planning option.

16.0 Reproduce photographic media -- The student will be able to:
- 16.01 Scan transparencies

17.0 Operate various format cameras -- The student will be able to:
- 17.01 Use view cameras.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 5**
Course Number: **8772050**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. This course is designed to expose the student in advanced instruction in the processing of color film and print color photographs.

18.0 Process color images -- The student will be able to:
18.01 Hand process color negatives and transparencies. (optional)
18.02 Process color negatives and transparencies. (optional)
18.03 Down load images to a computer.
18.04 Save images in a computer to an external storage device.

19.0 Procure color photographs -- The student will be able to:
19.01 Process color paper. (optional)
19.02 Print color negatives. (optional)
19.03 Print color negatives using color analyzer. (optional)
19.04 Purchase color mediums
19.05 Calibrate a computer monitor
19.06 Analyze a color print for correct color and contrast.

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
05.02 Locate, organize and reference written information from various sources. CM 3.0
05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
05.05 Apply active listening skills to obtain and clarify information. CM 7.0
05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

06.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
06.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
06.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
06.03 Present information formally and informally for specific purposes and audiences. AF2.9

07.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
07.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0

07.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
07.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
07.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

08.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:

08.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
08.02 Explain emergency procedures to follow in response to workplace accidents.
08.03 Create a disaster and/or emergency response plan.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 6**
Course Number: **8772060**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. This course covers the operation of various format cameras and to demonstrate appropriate communication skills.

14.0 Demonstrate appropriate communication skills -- The student will be able to:
- 14.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
- 14.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
- 14.03 Read and follow written and oral instructions.

17.0 Operate various format cameras -- The student will be able to:
- 17.01 Use 2¼ format camera.

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 7**
Course Number: **8772070**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. The uses of studio lights are reviewed for commercial photography. Formal portraiture lighting, as well as electronic strobes are examined.

14.0 Demonstrate appropriate communication skills -- The student will be able to:
  14.01 Answer and ask questions coherently and concisely.
  14.02 Read critically by recognizing assumptions and implications and by evaluating ideas.
  14.03 Demonstrate appropriate telephone/communication skills.

25.0 Take studio photographs -- The student will be able to:
  25.01 Take portraits.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Commercial Photography Technology 8**
Course Number:	**8772080**
Course Credit:	**1**

Course Description:

This is one course in a series of eleven courses. This course covers the methods and practices currently used for digital photography to include the computer usage and software to manipulate photographs.

27.0 Use digital imaging -- The student will be able to:
  27.01 Use basic photographic computer skills
  27.02 Use a professional imagining program.
  27.03 Use a flatbed and film scanner.
  27.04 Output photographic quality images using a digital printer.
  27.05 Use digital camera.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title:	**Commercial Photography Technology 9**
Course Number:	**8772090**
Course Credit:	**1**

Course Description:

This is one course in a series of eleven courses. This course covers aspects of commercial photography.

25.0 Take studio photographs -- The student will be able to:
  25.01 Take commercial photographs.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 10**
Course Number: **8772091**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. This course covers methods of preparing media presentations.

26.0 Produce media presentations -- The student will be able to:
    26.01 Prepare script for slide presentation.
    26.02 Shoot slides for slide presentation.
    26.03 Produce slide presentation.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Commercial Photography Technology 11**
Course Number: **8772092**
Course Credit: **1**

Course Description:

This is one course in a series of eleven courses. This course covers methods of preparing media presentations and the basics of entrepreneurship.

26.0 Produce media presentations -- The student will be able to:
  26.01 Prepare script for video presentation.
  26.02 Shoot video tape.
  26.03 Produce video presentation.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Television Production**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8772100	I100104
CIP Number	0610.010403	0610.010403
Grade Level	9-12, 30, 31	30, 31
Standard Length	11 Credits	1650 Hours
Teacher Certification	TEC ELEC ¶ 7 ¶ G TV PRO TEC @ 7 G TEC ED 1 @ 2	TEC ELEC ¶ 7 ¶ G TV PRO TEC @ 7 G TEC ED 1 @ 2
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-4031 27-4030 27-4032	27-4031 27-4030 27-4032
Facility Code	212 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication

The purpose of this program is to prepare students for initial employment as television production operators, (SOC 27-4031) television broadcast technicians, (SOC 27-4012) camera operator, (SOC 27-4031) all other professional/para-professional technicians, video recording engineers, audio recording engineers.

The content should include, but is not be limited to, communication skills; leadership skills; human relations and employability skills; safe and efficient work practices; and preparation to assume responsibility for overall production of television studio activities including: scripts, lighting, shooting and directing, electronic news gathering, and field production.

Career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Television Production industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of four Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	RTT0514	Studio Assistant	450 Hours	27-4030
B	RTT0516	Studio Technician	450 Hours	27-4031
C	RTT0518	Studio Technician/Edit Assistant	450 Hours	27-4032
D	RTT0520	Television Production/Edit Tech	300 Hours	27-4032

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8772110 8772120 8772130	Television Production 1 Television Production 2 Television Production 3	3 Credits	27-4030 27-4030 27-4030	2 2 3
B	8772140 8772150 8772160	Television Production 4 Television Production 5 Television Production 6	3 Credits	27-4031 27-4031 27-4031	3 3 3
C	8772170 8772180 8772190	Television Production 7 Television Production 8 Television Production 9	3 Credits	27-4032 27-4032 27-4032	3 3 3
D	8772191 8772192	Television Production 10 Television Production 11	2 Credits	27-4032 27-4032	3 3

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C. Other organizations provide leadership training and support for this program, examples include: Student Television Network (STN), Technology Student Association (TSA), the Florida Scholastic Press Association, and district film competitions/festivals

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate knowledge of the television production technology program instructional system, safety procedures and trade terminology.
02.0 Stage a set as directed for television production.
03.0 Perform lighting activities for a planned production.
04.0 Demonstrate correct use of basic studio equipment used in television production.
05.0 Demonstrate ability to identify different types of script copy.
06.0 Demonstrate ability to interpret a broadcast style script.
07.0 Exhibit knowledge of the television production team.
08.0 Exhibit ability to apply skills through planning, writing, directing, editing and recording a television program.
09.0 Perform digital audio and video recording and editing operations.
10.0 Perform television production and programming activities.
11.0 Perform character generator and special effects generator functions.
12.0 Operate television studio audio control system.
13.0 Perform Electronic News Gathering (ENG) and Electronic Field Production (EFP) equipment functions.
14.0 Demonstrate ability in studio production.
15.0 Write, produce, direct and edit a variety of television programming.
16.0 Understand career opportunities in the television industry.
17.0 Demonstrate an independent level of proficiency in one or more areas of television production.
18.0 Demonstrate an ability to specialize in one or more areas of television production.
19.0 Translate a written script into a full television production.
20.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
21.0 Demonstrate mathematics knowledge and skills.
22.0 Demonstrate science knowledge and skills.
23.0 Explain the importance of employability and entrepreneurship skills.
24.0 Demonstrate internet search and research methods.
25.0 Demonstrate language arts knowledge and skills.
26.0 Solve problems using critical thinking skills, creativity and innovation.
27.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.

28.0 Use information technology tools.
29.0 Describe the importance of professional ethics and legal responsibilities.
30.0 Demonstrate personal money-management concepts, procedures, and strategies.
31.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
32.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Television Production
PSAV Number: I100104

Course Number: RTT0514
Occupational Completion Point: A
Studio Assistant – 450 Hours – SOC Code 27-4030

01.0 Demonstrate knowledge of the television production technology program instructional system, safety procedures and trade terminology -- The student will be able to:
- 01.01 Describe the operating system of the vocational program.
- 01.02 State and apply general safety rules for operation of equipment and learning activities in the lab.
- 01.03 Utilize trade terminology in the television production lab.
- 01.04 Utilize trade abbreviations and acronyms as appropriate.
- 01.05 Transport equipment safely and securely.
- 01.06 Store equipment in appropriate locations.

02.0 Stage a set as directed for television production -- The student will be able to:
- 02.01 Dress a set for a television production.
- 02.02 Inspect for and correct safety concerns.
- 02.03 Sketch a set plan.

03.0 Perform lighting activities for a planned production -- The student will be able to:
- 03.01 Describe types of lighting fixtures.
- 03.02 Identify parts of lighting fixtures.
- 03.03 Perform special effects lighting.
- 03.04 Set-up appropriate lighting for a production.
- 03.05 Describe functions of master lighting panel and dimmer board.
- 03.06 Operate master lighting panel to dimmer board.
- 03.07 Analyze lighting needs for production.

04.0 Demonstrate correct use of basic studio equipment used in television production -- The student will be able to:
- 04.01 Load, record cue, transfer and play video and audio from tapes, DVDs, SD cards and HD Drives.
- 04.02 Demonstrate the steps necessary to set up, turn on and operate a video camera.
- 04.03 Demonstrate the steps to set up, turn on, and operate audio production equipment.
- 04.04 Demonstrate picture composition principles.
- 04.05 Describe types of video connectors
- 04.06 Describe types of audio connectors.
- 04.07 Identify, select and demonstrate use of an appropriate microphone.
- 04.08 Assemble audio and video cables.
- 04.09 Troubleshoot a bad cable connection.
- 04.10 Replace lamp in a light fixture.
- 04.11 Identify the qualities of a good audio track.
- 04.12 Demonstrate basic television lighting.

04.13 Explain the care, storage and use of television hardware and software.
04.14 Select appropriate equipment.
04.15 Demonstrate facility and equipment inventory, maintenance and management.

06.0 Demonstrate ability to interpret a broadcast style script -- The student will be able to:
06.01 Identify the components of a storyboard script.
06.02 Interpret a storyboard.
06.03 Demonstrate an understanding of broadcast scripts.

07.0 Exhibit knowledge of the television production team -- The student will be able to:
07.01 List the job functions of the television production team.
07.02 Describe the steps of the production process.
07.03 Demonstrate ability to give and follow directions.
07.04 Demonstrate ability to function as a member of the production team.
07.05 Set and adhere to production deadlines.

16.0 Understand career opportunities in the television industry -- The student will be able to:
16.01 Identify a career objective.
16.02 Identify sources of information concerning careers.
16.03 List the skills, attitudes, abilities and training required for jobs in the television industry.
16.04 List the rapid changes occurring in the television industry.
16.05 Describe employment opportunities in television related careers.
16.06 Explain the importance of updating occupational skills and knowledge through continued education and training.

20.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
20.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
20.02 Locate, organize and reference written information from various sources. CM 3.0
20.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
20.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
20.05 Apply active listening skills to obtain and clarify information. CM 7.0
20.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
20.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

21.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
21.01 Demonstrate knowledge of arithmetic operations. AF3.2
21.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
21.03 Construct charts/tables/graphs using functions and data. AF3.5

22.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
22.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
22.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

23.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

23.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
23.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
23.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
23.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
23.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
23.06 Identify and exhibit traits for retaining employment. ECD 7.0
23.07 Identify opportunities and research requirements for career advancement. ECD 8.0
23.08 Research the benefits of ongoing professional development. ECD 9.0
23.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: RTT0516
Occupational Completion Point: B
Studio Technician – 450 Hours – SOC Code 27-4031

04.0 Demonstrate correct use of basic equipment used in television production -- The student will be able to:
04.01 Identify and select microphones for production.
04.02 Place microphones for maximum effect.
04.03 Describe video and audio input and output devices.
04.04 Set up video and audio input and output devices for production.
04.05 Operate video and audio input and output devices during recording and playback.
04.06 Describe function of video and audio monitors.
04.07 Set up video and audio monitors for production
04.08 Describe function of waveform, vector, and histogram video scopes
04.09 Recognize legal video settings (min.& max. IRE, chroma, and brightness levels) for broadcasting.
04.00 Describe function of a CCU.
04.10 Operate a CCU to correct video signals from studio cameras.
04.11 Describe parts of an audio mixing console.
04.12 Operate audio mixing console.

05.0 Demonstrate ability to identify different types of script copy -- The student will be able to:
05.01 Identify scripts by format, function and utilization.
05.02 Define terminology used in broadcast scriptwriting.

09.0 Perform digital audio and video recording and editing operations -- The student will be able to:
09.01 Identify and describe different recording devices.
09.02 Describe operational parts of a recording devices.
09.03 Operate video recording devices to record and playback.
09.04 Describe operational parts of a video editor.
09.05 Perform editing procedures for both audio and video production needs.
09.06 .

10.0 Perform television production activities -- The student will be able to:
10.01 Operate master switches.

- 10.02 Operate routing switcher for live production and digital recording.
- 10.03 Setup machine and tuner for in-house playback.
- 10.04 Compute broadcast math.
- 10.05 Develop script for a program.
- 10.06 Draw storyboard for a planned production.
- 10.07 Direct participants in production of a program.
- 10.08 Perform on-camera.

11.0 Perform character generator and special effects generator functions -- The student will be able to:

- 11.01 Describe operational parts of character generator.
- 11.02 Set-up character generator.
- 11.03 Describe inputs of special effects generator.
- 11.04 Operate special effects generator during production.
- 11.05 Operate character generator during production.
- 11.06 Operate a Telemprompter
- 11.07 Create television graphics using industry standard equipment.
- 11.08 Understand televsion graphic safe zone and color design.

12.0 Operate television studio audio control system -- The student will be able to:

- 12.01 Identify and select microphones for production.
- 12.02 Place microphones for maximum effect.
- 12.03 Describe parts of sound recording and playback devices.
- 12.04 Operate sound recording and playback devices during production.
- 12.05 Describe parts of an audio mixing console.
- 12.06 Operate audio mixing console.

13.0 Perform Electronic News Gathering (ENG) and Electronic Field Production (EFP) equipment functions -- The student will be able to:

- 13.01 List and describe ENG and EFP equipment components.

14.0 Demonstrate industry standard skill forn studio production -- The student will be able to:

- 14.01 Demonstrate skills in selecting production topics.
- 14.02 Determine quality of production topics.
- 14.03 Operate television studio equipment
- 14.04 Adhere to production deadlines.

17.0 Demonstrate an independent level of proficiency in one or more areas of television production -- The student will be able to:

- 17.01 Perform at an independent level of proficiency in area(s) of specification.

18.0 Demonstrate an ability to specialize in one or more areas of television production -- The student will be able to:

- 18.01 Survey and select area(s) for specialization in television production.

24.0 Demonstrate internet search and research methods. – The student will be able to

- 24.01 Demonstrate basic computer operations
- 24.02 Access world wide web/internet for transfer of communication and date collection/research

25.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0

25.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
25.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
25.03 Present information formally and informally for specific purposes and audiences. AF2.9

26.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
26.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
26.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
26.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
26.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

27.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
27.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
27.02 Explain emergency procedures to follow in response to workplace accidents.
27.03 Create a disaster and/or emergency response plan. SHE 2.0

Course Number: RTT0518
Occupational Completion Point: C
Studio Technician/Edit Assistant – 450 Hours – SOC Code 27-4032

06.0 Demonstrate ability to interpret a broadcast style script -- The student will be able to:
06.01 Write broadcast scripts.

08.0 Exhibit ability to apply skills through planning, writing, directing, editing, and recording a television program -- The student will be able to:
08.01 Plan a television program.
08.02 Write a television program.
08.03 Direct a television program.
08.04 Edit a television program.
08.05 Record a television program.

09.0 Perform digital audio and video recording and editing operations -- The student will be able to:
09.01 Set up audio and or video editing equipment and or software.
09.02 Set-up audio and or video recording and playback devices.
09.03 Perform editing procedures..

13.0 Perform Electronic News Gathering (ENG) and Electronic Field Production (EFP) equipment functions -- The student will be able to:
13.01 Select and set up equipment for field production.
13.02 Operate equipment during field production segments.

15.0 Write, produce, direct, and edit a variety of television programming -- The student will be able to:
15.01 Write, produce, direct, and edit news programs.

15.02 Write, produce, direct, and edit editorials.
15.03 Write, produce, direct, and edit feature programs.
15.04 Write, produce, direct, and edit interview programs.
15.05 Write, produce, direct, and edit commercials.

17.0 Demonstrate an independent level of proficiency in one or more areas of television production -- The student will be able to:
17.01 Perform at an independent level of proficiency in area(s) of specialization.

18.0 Demonstrate an ability to specialize in one or more areas of television production -- The student will be able to:
18.01 Survey and select area(s) for specialization in television production.

19.0 Translate written script into a full television production -- The student will be able to:
19.01 Produce a television program from a written script.

28.0 Use information technology tools--The students will be able to:
28.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
28.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
28.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
28.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

29.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
29.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
29.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
29.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
29.04 Interpret and explain written organizational policies and procedures. ELR 2.0

30.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
30.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
30.02 Describe the effect of money management on personal and career goals. FL 3.0
30.03 Develop a personal budget and financial goals. FL3.1
30.04 Complete financial instruments for making deposits and withdrawals. FL3.2
30.05 Maintain financial records. FL3.3
30.06 Read and reconcile financial statements. FL3.4
30.07 Research, compare and contrast investment opportunities.

Course Number: RTT0520
Occupational Completion Point: D
Television Production/Edit Technician – 300 Hours – SOC Code 27-4032

17.0 Demonstrate an independent level of proficiency in one or more areas of television production -- The student will be able to:
  17.01 Perform at an independent level of proficiency in area(s) of specialization.

18.0 Demonstrate an ability to specialize in one or more areas of television production -- The student will be able to:
  18.01 Survey and select area(s) for specialization in television production.

25.0 Demonstrate computer operations in television production -- The student will be able to:
  25.01 Utilize computer manipulate digital equipment and process digital signal.

31.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
  31.01 Describe the nature and types of business organizations. SY 1.0
  31.02 Explain the effect of key organizational systems on performance and quality.
  31.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
  31.04 Explain the impact of the global economy on business organizations.

32.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
  32.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
  32.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
  32.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
  32.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 1**
Course Number: **8772110**
Course Credit: **1**

Course Description:

01.0 Demonstrate knowledge of the television production technology program instructional system, safety procedures and trade terminology -- The student will be able to:
- 01.01 Describe the operating system of the vocational program.
- 01.02 State and apply general safety rules for operation of equipment and learning activities in the lab.
- 01.03 Utilize trade terminology in the television production lab
- 01.04 Utilize trade abbreviations and acronyms as appropriate.
- 01.05 Transport equipment safely and securely)
- 01.06 Store equipment in appropriate locations

02.0 Stage a set as directed for television production -- The student will be able to:
- 02.01 Dress a set for a television production.
- 02.02 Inspect for and correct safety concerns.
- 02.03 Sketch a set plan.

03.0 Perform lighting activities for a planned production -- The student will be able to:
- 03.01 Describe types of lighting fixtures.
- 03.02 Identify parts of lighting fixtures.
- 03.03 Perform special effects lighting.
- 03.04 Set-up appropriate lighting for a production.
- 03.05 Describe functions of master lighting panel and dimmer board.
- 03.06 Operate master lighting panel to dimmer board.
- 03.07 Analyze lighting needs for production.

04.0 Demonstrate correct use of basic studio equipment used in television production -- The student will be able to:
- 04.01 Load, cue, transfer, record and play video and audio from tapes, DVDs, SD Cards, and HD Drives.
- 04.02 Demonstrate steps to set up, turn on and operate a video camera.
- 04.03 Demonstrate picture composition principles.
- 04.04 Describe types of video connectors.
- 04.05 Describe types of audio connectors.
- 04.06 Identify, select and demonstrate use of an appropriate microphone.
- 04.07 Assemble audio and video cables.
- 04.08 Troubleshoot a bad cable connection.
- 04.09 Replace bulb in a light fixture.
- 04.10 Identify the qualities of a good audio track.
- 04.11 Demonstrate basic television lighting.
- 04.12 Explain the care, storage and use of television hardware and software.
- 04.13 Select appropriate equipment.
- 04.14 Demonstrate facility and equipment inventory, maintenance and management.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 2**
Course Number: **8772120**
Course Credit: **1**

Course Description:

06.0 Demonstrate ability to interpret a broadcast style script -- The student will be able to:
  06.01 Plan and produce a storyboard.
  06.02 Specify steps leading to broadcast scripts.

07.0 Exhibit knowledge of the television production team -- The student will be able to:
  07.01 List the job functions of the television production team.
  07.02 Describe the steps of the production process.
  07.03 Demonstrate ability to give and follow directions.
  07.04 Demonstrate ability to function as a member of the production team.
  07.05 Set and adhere to production deadlines.

16.0 Understand career opportunities in the television industry -- The student will be able to:
  16.01 Identify a career objective.
  16.02 Identify sources of information concerning careers.
  16.03 List the skills, attitudes, abilities and training required for jobs in the television industry.
  16.04 List the rapid changes occurring in the television industry.
  16.05 Describe employment opportunities in television related careers.
  16.06 Explain the importance of updating occupational skills and knowledge through continued education and training.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 3**
Course Number: **8772130**
Course Credit: **1**

Course Description:

20.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 20.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 20.02 Locate, organize and reference written information from various sources. CM 3.0
- 20.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 20.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 20.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 20.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 20.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

21.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 21.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 21.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 21.03 Construct charts/tables/graphs using functions and data. AF3.5

22.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 22.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 22.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

23.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 23.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 23.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 23.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 23.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 23.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 23.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 23.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 23.08 Research the benefits of ongoing professional development. ECD 9.0
- 23.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0
- 23.10 Demonstrate knowledge of the "Florida Right-To-Know Law" as recorded in Florida Statutes, Chapter 442.

24.0 Demonstrate computer operations in television production -- The student will be able to:
  24.01 Demonstrate basic computer operations.
  24.02 Demonstrate teleprompter operation.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 4**
Course Number: **8772140**
Course Credit: **1**

Course Description:

04.0 Demonstrate correct use of basic equipment used in television production -- The student will be able to:
- 04.01 Identify and select microphones for production.
- 04.02 Place microphones for maximum effect.
- 04.03 Describe video and audio input and output devices
- 04.04 Set up video and audio input and output devices for production.
- 04.05 Operate video and audio input and output devices during recording and playback.
- 04.06 Describe function of video and audio monitors.
- 04.07 Set up video and audio monitors for production
- 04.08 Describe function of waveform, vector, and histogram video scopes .
- 04.09 Recognize legal video settings (Min. & Max. IRE, chroma, and brightness levels) for broadcasting
- 04.10 Describe function of a CCU.
- 04.11 Operate a CCU to correct video signals from studio cameras
- 04.12 Describe parts of an audio mixing console
- 04.13 Operate audio mixing console.

11.0 Perform character generator and special effects generator functions -- The student will be able to:
- 11.01 Describe operational parts of character generator.
- 11.02 Set-up character generator.
- 11.03 Describe inputs of special effects generator.
- 11.04 Operate special effects generator during production.
- 11.05 Operate character generator during production.
- 11.06 Operate a Telemprompter
- 11.07 Create television graphics using industry standard equipment.
- 11.08 Understand televsion graphic safe zone and color design.

14.0 Demonstrate industry standard skill for studio production -- The student will be able to:
- 14.01 Demonstrate skills in selecting production topics.
- 14.02 Determine quality of production topics.
- 14.03 Operate television studio equipment..
- 14.04 Adhere to production deadlines.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 5**
Course Number: **8772150**
Course Credit: **1**

Course Description:

05.0 Demonstrate ability to identify different types of script copy -- The student will be able to:
- 05.01 Identify scripts by format, function and utilization.
- 05.02 Define terminology used in broadcast scriptwriting.

09.0 Perform digital audio and video recording and editing operations --The student will be able to:
- 09.01 Identify and describe different video recording devices.
- 09.02 Describe operational parts of a video recording device.
- 09.03 Operate video recording devices to record and playback.
- 09.04 Describe operational parts of a video editor.
- 09.05 Perform assemble edits in linear and non-linear format.

10.0 Perform television production activities -- The student will be able to:
- 10.01 Operate master switches.
- 10.02 Operate routing switcher for live production and digital recording.
- 10.03 Set up machine and tuner for in-house playback.
- 10.04 Compute broadcast math.
- 10.05 Develop script for a program.
- 10.06 Draw storyboard for a planned production.
- 10.07 Direct participants in production of a program.
- 10.08 Perform on-camera.

12.0 Operate television studio audio control system -- The student will be able to:
- 12.01 Identify and select microphones for production.
- 12.02 Place microphones for maximum effect.
- 12.03 Describe parts of sound recording and playback devices.
- 12.04 Operate sound recording and playback devices.
- 12.05 Describe parts of an audio mixing console.
- 12.06 Operate audio mixing console.

13.0 Perform Electronic News Gathering (ENG) and Electronic Field Production (EFP) equipment functions -- The student will be able to:
- 13.01 List and describe ENG and EFP equipment components.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 6**
Course Number: **8772160**
Course Credit: **1**

Course Description:

17.0 Demonstrate an independent level of proficiency in one or more areas of television production -- The student will be able to:
  17.01 Perform at an independent level of proficiency in area(s) of specialization.

18.0 Demonstrate an ability to specialize in one or more areas of television production -- The student will be able to:
  18.01 Survey and select area(s) for specialization in television production.

28.0 Use information technology tools--The students will be able to:
  28.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
  28.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
  28.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
  28.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

29.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
  29.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
  29.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
  29.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
  29.04 Interpret and explain written organizational policies and procedures. ELR 2.0

30.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
  30.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
  30.02 Describe the effect of money management on personal and career goals. FL 3.0
  30.03 Develop a personal budget and financial goals. FL3.1
  30.04 Complete financial instruments for making deposits and withdrawals. FL3.2
  30.05 Maintain financial records. FL3.3
  30.06 Read and reconcile financial statements. FL3.4
  30.07 Research, compare and contrast investment opportunities.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 7**
Course Number: **8772170**
Course Credit: **1**

Course Description:

06.0 Demonstrate ability to interpret a broadcast style script -- The student will be able to:
  06.01 Write broadcast scripts.

08.0 Exhibit ability to apply skills through planning, writing, directing, editing, and recording a television program -- The student will be able to:
  08.01 Plan a television program.
  08.02 Write a television program.
  08.03 Direct a television program.
  08.04 Edit a television program.
  08.05 Record a television program.

09.0 Perform digital audio and video recording and editing operations -- The student will be able to:
  09.01 Perform insert edits in linear and non-linear format.
  09.02 Set-up video input and output devices.
  09.03 Set-up video-cassette editor.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 8**
Course Number: **8772180**
Course Credit: **1**

Course Description:

13.0 Perform Electronic News Gathering (ENG) and Electronic Field Production (EFP) equipment functions -- The student will be able to:
- 13.01 List and describe ENG and EFP equipment components.
- 13.02 Set up equipment for field production.
- 13.03 Operate equipment during field production segments.

15.0 Write, produce, direct and edit a variety of television programming -- The student will be able to:
- 15.01 Write, produce, direct and edit news programs.
- 15.02 Write, produce, directs and edits editorials.
- 15.03 Write, produce, direct and edit feature programs.
- 15.04 Write, produce, direct and edit interview programs.
- 15.05 Write, produce, directs and edits commercials.

17.0 Demonstrate an independent level of proficiency in one or more areas of television production -- The student will be able to:
- 17.01 Perform at an independent level of proficiency in area(s) of specialization.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 9**
Course Number: **8772190**
Course Credit: **1**

Course Description:

18.0 Demonstrate an ability to specialize in one or more areas of television production -- The student will be able to:
 18.01 Survey and select area(s) for specialization in television production.

19.0 Translate written script into a full television production -- The student will be able to:
 19.01 Produce a television program from a written script.

25.0 Demonstrate computer operations in television production -- The student will be able to:
 25.01 Set-up and operate a homepage on Internet.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 10**
Course Number: **8772191**
Course Credit: **1**
Course Description:

17.0 Demonstrate an independent level of proficiency in one or more areas of television production -- The student will be able to:
  17.01 Perform at an independent level of proficiency in area(s) of specialization.

25.0 Demonstrate computer operations in television production -- The student will be able to:
  25.01 Utilize computer manipulate digital equipment and process digital signal.

31.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
  31.01 Describe the nature and types of business organizations. SY 1.0
  31.02 Explain the effect of key organizational systems on performance and quality.
  31.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
  31.04 Explain the impact of the global economy on business organizations.

32.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
  32.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
  32.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
  32.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
  32.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Television Production 11**
Course Number: **8772192**
Course Credit: **1**

Course Description:

18.0 Demonstrate an ability to specialize in one or more areas of television production -- The student will be able to:
    18.01 Survey and select area(s) for specialization in television production.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Film Production Equipment Operations**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8772200	I100112
CIP Number	0610.010201	0610.010201
Grade Level	9-12	30, 31
Standard Length	11 Credits	1600 Hours
Teacher Certification	TV PRO TEC @7 G TEC ELEC @7 G	TV PRO TEC @7 G TEC ELEC @7 G
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-1027 27-4011 27-4031	27-1027 27-4011 27-4031
Facility Code	212 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for initial employment in film production equipment operation occupations, as camera assistants, sound equipment operators, editing equipment operators, set builders, grips and lighting equipment operators

Program Structure

The content should include, but not be limited to, instruction that prepares individuals to function as members of a technical team within the framework of an organized film production. Instruction includes: purchasing, renting, scheduling and the application of technical skills to solving unique shooting problems. Also included are skills relating to professionalism, employability, communication and supervision.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Film Production industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

This program is a planned sequence of instruction consisting of five Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	FIL0080	Set Builder/Prop Maker	300 Hours	27-1027
B	FIL0081	Sound Equipment Operator	250 Hours	27-4014
C	FIL0082	Grips and Lighting Equipment Operator	330 Hours	27-4011
D	FIL0083	Editing Equipment Operator	360 Hours	27-4032
E	FIL0084	Camera Assistant	360 Hours	27-4031

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8772210	Film Production Equip Operations 1	1 Credit	27-1027	2
	8772220	Film Production Equip Operations 2	1 Credit		2
B	8772230	Film Production Equip Operations 3	1 Credit	27-4014	2
	8772240	Film Production Equip Operations 4	1 Credit		2
C	8772250	Film Production Equip Operations 5	1 Credit	27-4011	2
	8772260	Film Production Equip Operations 6	1 Credit		2
D	8772270	Film Production Equip Operations 7	1 Credit	27-4032	2
	8772280	Film Production Equip Operations 8	1 Credit		2
	8772290	Film Production Equip Operations 9	1 Credit		2
E	8772291	Film Production Equip Operations 10	1 Credit	27-4031	2
	8772292	Film Production Equip Operations 11	1 Credit		2

Laboratory Activities

Production activities are an integral part of this program and provide practical application and instruction in the operation of equipment in areas of filming, lighting, sound, set construction, gripping and editing. In addition students will be exposed to production management, special effects, script supervision, casting, make-up, wardrobe and assistant directing.

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Construct and install theatrical scenery to the specifications required in a scene design for a film production.
02.0 Function as part of a technical support team in planning, implementing and running the technical aspects of film production.
03.0 Be knowledgeable of the interrelationship which exists between the various creative and craft skills required for film production.
04.0 Demonstrate mathematics knowledge and skills.
05.0 Demonstrate science knowledge and skills.
06.0 Explain the importance of employability and entrepreneurship skills.
07.0 Operate audio equipment for film productions.
08.0 Execute the audio requirements for film production.
09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
10.0 Demonstrate language arts knowledge and skills.
11.0 Solve problems using critical thinking skills, creativity and innovation.
12.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
13.0 Execute pre-production, production and post-production tasks for the area of gripping.
14.0 Execute pre-production, production and post-production tasks for the area of film lighting.
15.0 Use information technology tools.
16.0 Describe the importance of professional ethics and legal responsibilities.
17.0 Demonstrate personal money-management concepts, procedures, and strategies.
18.0 Execute pre-production, production and post-production tasks for the area of film editing equipment operation.
19.0 Execute pre-production, production and post-production tasks for the area of camera assisting.
20.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
21.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Film Production Equipment Operations**
PSAV Number: **I100112**

Course Number: FIL0080
Occupational Completion Point: A
Set Builder/Prop Maker -- 300 Hours -- SOC Code 27-1027

01.0 Construct and install theatrical scenery to the specifications required in a scene design for a film production -- The student will be able to:
- 01.01 Purchase appropriate materials and hardware for scenic construction.
- 01.02 Construct common flat scenery.
- 01.03 Construct three-dimensional scenery.
- 01.04 Execute application techniques used in painting scenery.
- 01.05 Construct special effects scenery.
- 01.06 Schedule and organize transportation of scenery to remote locations.
- 01.07 Supervise scene shop activities

02.0 Function as part of a technical support team in planning, implementing and running the technical aspects of film production -- The student will be able to:
- 02.01 Perform as a member of a technical support team within the framework of an organized film production.
- 02.02 Execute job assignments in order to meet production deadlines.
- 02.03 Execute technical needs to apply accepted principles of film technology to production situation(s).

03.0 Be knowledgeable of the interrelationship which exists between the various creative and craft skills required for film production -- The student will be able to:
- 03.01 Differentiate the working relationships, which exist between the various participants involved in the film making process.
- 03.02 Demonstrate the proper use of standard film making forms.
- 03.03 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make-up and editing.
- 03.04 Execute strategies for meeting the technical requirements of a film production crew.

04.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 04.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 04.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 04.03 Construct charts/tables/graphs using functions and data. AF3.5

05.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 05.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 05.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 06.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 06.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 06.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 06.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 06.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 06.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 06.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 06.08 Research the benefits of ongoing professional development. ECD 9.0
- 06.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: FIL0081
Occupational Completion Point: B
Sound Equipment Operator/Stagetech – 250 Hours -- SOC Code 27-4011

07.0 Operate audio equipment for film productions -- The student will be able to:
- 07.01 Operate sound reinforcement systems to meet performance needs.
- 07.02 Operate various audio equipment to achieve proper sound mix on an audio mixer
- 07.03 Perform transactions with audio suppliers.
- 07.04 Execute the design for proper microphone and speaker placement.

08.0 Execute the audio requirements for film production -- The student will be able to:
- 08.01 Execute strategies for recording production film sound to acceptable industry standards.
- 08.02 Record production and post-production sound.
- 08.03 Work as a member of a film production team.
- 08.04 Develop appropriate industry contacts.
- 08.05 Assist in analyzing audio needs for film production to perform transactions with suppliers.

09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 09.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 09.02 Locate, organize and reference written information from various sources. CM 3.0
- 09.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 09.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 09.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 09.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 09.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

10.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 10.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 10.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 10.03 Present information formally and informally for specific purposes and audiences. AF2.9

11.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:

- 11.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 11.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 11.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 11.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

Course Number: FIL0082
Occupational Completion Point: C
Grips And Lighting Equipment Operator – 330 Hours -- SOC Code 27-4011

13.0 Execute pre-production, production and post-production tasks for the area of gripping -- The student will be able to:

- 13.01 Execute strategies to properly utilize grip equipment during film production.
- 13.02 Accept directions in the placement of dollies, cranes and other camera mounts as required for film production.
- 13.03 Execute pre and post-production routines.
- 13.04 Work as a member of a film production team.
- 13.05 Develop appropriate industry contacts.
- 13.06 Demonstrate safe work habits.
- 13.07 Assist in determining grip equipment needs.
- 13.08 Execute required effects for lighting set-ups.

14.0 Execute pre-production, production and post-production tasks for the area of film lighting -- The student will be able to:

- 14.01 Utilize standard film lighting equipment to production specifications.
- 14.02 Execute power distribution system for film lighting equipment.
- 14.03 Execute pre and post-production routines necessary for the lighting department.
- 14.04 Work as a member of a film production team.
- 14.05 Create a safe working environment.
- 14.06 Develop appropriate industry contacts.
- 14.07 Execute production requirements to determine lighting equipment and maintenance needs.
- 14.08 Execute required lighting effects for film shooting.
- 14.09 Hang, connect and focus lights for a production.

15.0 Use information technology tools--The students will be able to:

- 15.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 15.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 15.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 15.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

16.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

16.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
16.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
16.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
16.04 Interpret and explain written organizational policies and procedures. ELR 2.0

17.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

17.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
17.02 Describe the effect of money management on personal and career goals. FL 3.0
17.03 Develop a personal budget and financial goals. FL3.1
17.04 Complete financial instruments for making deposits and withdrawals. FL3.2
17.05 Maintain financial records. FL3.3
17.06 Read and reconcile financial statements. FL3.4
17.07 Research, compare and contrast investment opportunities.

Course Number: FIL0083
Occupational Completion Point: D
Editing Equipment Operator – 360 Hours -- SOC Code 27-4031

18.0 Execute pre-production, production and post-production tasks for the area of film editing equipment operation -- The student will be able to:

18.01 Operate editing equipment.
18.02 Execute standard editing room routines.
18.03 Execute required editing room documentation.
18.04 Work as a member of a film production team.
18.05 Develop appropriate industry contacts.
18.06 Work with suppliers and film laboratories.
18.07 Execute editing sequences using industry standard equipment.

Course Number: FIL0084
Occupational Completion Point: E
Camera Assistant – 360 Hours -- SOC Code 27-4031

19.0 Execute pre-production, production and post-production tasks for the area of camera assisting -- The student will be able to:

19.01 Assist in the execution of shooting activities using standard industry camera equipment.
19.02 Assist in shooting activities required for appropriate camera department documentation.
19.03 Execute the proper care and handling of camera and camera assist equipment.
19.04 Work as a member of a film production team.
19.05 Develop appropriate industry contacts.
19.06 Assist in analyzing production requirements to determine camera equipment needs.

20.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

- 20.01 Describe the nature and types of business organizations. SY 1.0
- 20.02 Explain the effect of key organizational systems on performance and quality.
- 20.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 20.04 Explain the impact of the global economy on business organizations.

21.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

- 21.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 21.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 21.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 21.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 1**
Course Number: **8772210**
Course Credit: **1**

Course Description:

01.0 Construct and install theatrical scenery to the specifications required in a scene design for a film production -- The student will be able to:
- 01.01 Purchase appropriate materials and hardware for scenic construction.
- 01.02 Construct common flat scenery.
- 01.03 Construct three-dimensional scenery.
- 01.04 Execute application techniques used in painting scenery.

02.0 Function as part of a technical support team in planning, implementing and running the technical aspects of film production -- The student will be able to:
- 02.01 Perform as a member of a technical support team within the framework of an organized film production.
- 02.02 Execute job assignments in order to meet production deadlines.
- 02.03 Execute technical needs to apply accepted principles of film technology to production situation(s).

03.0 Be knowledgeable of the interrelationship which exists between the various creative and craft skills required for film production -- The student will be able to:
- 03.01 Differentiate the working relationships, which exist between the various participants involved in the film making process.
- 03.02 Demonstrate the proper use of standard film making forms.

04.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 04.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 04.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 04.03 Construct charts/tables/graphs using functions and data. AF3.5

05.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 05.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 05.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 06.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 06.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 06.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 06.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 06.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 06.06 Identify and exhibit traits for retaining employment. ECD 7.0

06.07 Identify opportunities and research requirements for career advancement. ECD 8.0
06.08 Research the benefits of ongoing professional development. ECD 9.0
06.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 2**
Course Number: **8772220**
Course Credit: **1**

Course Description:

01.0 Construct and install theatrical scenery to the specifications required in a scene design for a film production -- The student will be able to:
- 01.05 Construct special effects scenery.
- 01.06 Schedule and organize transportation of scenery to remote locations.
- 01.07 Supervise scene shop activities.

03.0 Be knowledgeable of the interrelationship which exists between the various creative and craft skills required for film production -- The student will be able to:
- 03.03 Define the specific technical processes used by the camera, grip, lighting, sound, art, costume, special effects, make-up and editing.
- 03.04 Execute strategies for meeting the technical requirements of a film production crew.

07.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 07.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 07.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 06.08 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 06.09 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 06.10 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 06.11 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 06.12 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 06.13 Identify and exhibit traits for retaining employment. ECD 7.0
- 06.14 Identify opportunities and research requirements for career advancement. ECD 8.0
- 06.15 Research the benefits of ongoing professional development. ECD 9.0
- 06.16 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 3**
Course Number: **8772230**
Course Credit: **1**

Course Description:

07.0 Operate audio equipment for film productions -- The student will be able to:
- 07.02 Operate various audio equipment to achieve proper sound mix on an audio mixer.
- 07.04 Execute the design for proper microphone and speaker placement.

08.0 Execute the audio requirements for film production -- The student will be able to:
- 08.01 Execute strategies for recording production film sound to acceptable industry standards.
- 08.02 Record production and post-production sound.
- 08.03 Work as a member of a film production team.
- 08.04 Develop appropriate industry contacts.

09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 09.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 09.02 Locate, organize and reference written information from various sources. CM 3.0
- 09.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 09.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 09.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 09.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 09.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

10.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 10.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 10.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 10.03 Present information formally and informally for specific purposes and audiences. AF2.9

11.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 11.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 11.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 11.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 11.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 4**
Course Number: **8772240**
Course Credit: **1**

Course Description:

07.0 Operate audio equipment for film productions -- The student will be able to:
- 07.01 Operate sound reinforcement systems to meet performance needs.
- 07.03 Perform transactions with audio suppliers.

08.0 Execute the audio requirements for film production -- The student will be able to:
- 08.05 Assist in analyzing audio needs for film production to perform transactions with suppliers.

09.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 09.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 09.02 Locate, organize and reference written information from various sources. CM 3.0
- 09.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 09.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 09.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 09.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 09.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

10.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 10.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 10.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 10.03 Present information formally and informally for specific purposes and audiences. AF2.9

11.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 11.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 11.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 11.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 11.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 5**
Course Number: **8772250**
Course Credit: **1**

Course Description:

10.0 Execute pre-production, production and post-production tasks for the area of gripping -- The student will be able to:
- 10.01 Execute strategies to properly utilize grip equipment during film production.
- 10.02 Accept directions in the placement of dollies, cranes and other camera mounts as required for film production.
- 10.03 Execute pre and post-production routines.
- 10.04 Work as a member of a film production team.
- 10.05 Develop appropriate industry contacts.
- 10.06 Demonstrate safe work habits.
- 10.07 Assist in determining grip equipment needs.
- 10.08 Execute required effects for lighting set-ups.

11.0 Execute pre-production, production and post-production tasks for the area of film lighting -- The student will be able to:
- 11.01 Utilize standard film lighting equipment to production specifications.
- 11.02 Execute power distribution system for film lighting equipment.
- 11.03 Execute pre and post-production routines necessary for the lighting department.
- 11.04 Work as a member of a film production team.
- 11.05 Create a safe working environment.
- 11.06 Develop appropriate industry contacts.
- 11.07 Execute production requirements to determine lighting equipment and maintenance needs.
- 11.08 Execute required lighting effects for film shooting.
- 11.09 Hang, connect and focus lights for a production.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 6**
Course Number: **8772260**
Course Credit: **1**

Course Description:

13.0 Execute pre-production, production and post-production tasks for the area of gripping --The student will be able to:
- 13.08 Execute required effects for lighting set-ups.

14.0 Execute pre-production, production and post-production tasks for the area of film lighting--The student will be able to:
- 14.06 Develop appropriate industry contacts.

15.0 Use information technology tools--The students will be able to:
- 15.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 15.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 15.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 15.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

16.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 16.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 16.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 16.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 16.04 Interpret and explain written organizational policies and procedures. ELR 2.0

17.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
- 17.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 17.02 Describe the effect of money management on personal and career goals. FL 3.0
- 17.03 Develop a personal budget and financial goals. FL3.1
- 17.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 17.05 Maintain financial records. FL3.3
- 17.06 Read and reconcile financial statements. FL3.4
- 17.07 Research, compare and contrast investment opportunities.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 7**
Course Number: **8772270**
Course Credit: **1**

Course Description:

18.0 Execute pre-production, production and post-production tasks for the area of film editing equipment operation -- The student will be able to:
    18.01 Operate editing equipment.
    18.02 Execute standard editing room routines.
    18.03 Execute required editing room documentation.
    18.04 Work as a member of a film production team.
    18.05 Execute editing sequences using industry standard equipment.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 8**
Course Number: **8772280**
Course Credit: **1**

Course Description:

18.0 Execute pre-production, production and post-production tasks for the area of film editing equipment operation -- The student will be able to:
  18.05 Develop appropriate industry contacts.
  18.06 Work with suppliers and film laboratories.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 9**
Course Number: **8772290**
Course Credit: **1**

Course Description:

06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
  06.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
  06.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
  06.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
  06.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
  06.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
  06.06 Identify and exhibit traits for retaining employment. ECD 7.0
  06.07 Identify opportunities and research requirements for career advancement. ECD 8.0
  06.08 Research the benefits of ongoing professional development. ECD 9.0
  06.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

19.0 Execute pre-production, production and post-production tasks for the area of camera assisting -- The student will be able to:
  19.01 Execute the proper care and handling of camera and camera assist equipment.
  19.02 Work as a member of a film production team.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 10**
Course Number: **8772291**
Course Credit: **1**

Course Description:

06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 06.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 06.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 06.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 06.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 06.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 06.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 06.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 06.08 Research the benefits of ongoing professional development. ECD 9.0
- 06.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

19.0 Execute pre-production, production and post-production tasks for the area of camera assisting -- The student will be able to:
- 19.01 Assist in the execution of shooting activities using standard industry camera equipment..
- 19.02 Assist in shooting activities required for appropriate camera department documentation.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Film Production Equipment Operations 11**
Course Number: **8772292**
Course Credit: **1**

Course Description:

19.0 Execute pre-production, production and post-production tasks for the area of camera assisting -- The student will be able to:
  19.05 Develop appropriate industry contacts.
  19.06 Assist in analyzing production requirements to determine camera equipment needs.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Audio Production**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8772300	I100230
CIP Number	0610.010223	0610.010223
Grade Level	9-12, 30, 31	30, 31
Standard Length	7 Credits	1050 Hours
Teacher Certification	TEC ELEC ¶ 7 ¶ G TV PRO TEC @7 G I ART-TEC 1 @ 2 TEC ED 1 @ 2	TEC ELEC ¶ 7 ¶ G TV PRO TEC @7 G I ART-TEC 1 @ 2 TEC ED 1 @ 2
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-3011 27-4011 27-4014 27-4012	27-3011 27-4011 27-4014 27-4012
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in network support services positions.

The purpose of this program is to prepare students for initial employment with occupational titles as radio and television announcer (SOC 27-3011), audio and video equipment technicians (SOC 27-4011), sound engineering technicians (SOC 27-4010), broadcast technicians (SOC 27-4012).

The content should include, but not be limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, announcing and moderating programs, preparing copy, programming, and operation of audio broadcast equipment to support the production of materials or programs

Program Structure

This program is a planned sequence of instruction consisting of four Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	RTT0522	Broadcast Announcer	150 Hours	27-3011
B	RTT0523	Audio Equipment Technician	300 Hours	27-4011
C	RTT0524	Sound Engineering Technician	300 Hours	27-4014
D	RTT0525	Broadcast Technician	300 Hours	27-4012

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8772310	Digital Audio Production 1	1 Credit	27-3011	2
B	8772320 8772330	Digital Audio Production 2 Digital Audio Production 3	1 Credit 1 Credit	27-4011	2 2
C	8772340 8772350	Digital Audio Production 4 Digital Audio Production 5	1 Credit 1 Credit	27-4014	2 2
D	8772360 8772370	Digital Audio Production 6 Digital Audio Production 7	1 Credit 1 Credit	27-4012	2 2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate knowledge of school and class procedures.
02.0 Demonstrate an ability to operate an audio console.
03.0 Demonstrate knowledge of production writing.
04.0 Demonstrate news-writing skills.
05.0 Demonstrate appropriate voice-over skills.
06.0 Demonstrate appropriate on-air skills.
07.0 Demonstrate appropriate broadcast speaking manner.
08.0 Demonstrate mathematics knowledge and skills.
09.0 Demonstrate science knowledge and skills.
10.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
11.0 Demonstrate language arts knowledge and skills.
12.0 Solve problems using critical thinking skills, creativity and innovation.
13.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
14.0 Demonstrate set-up and configuration of a computer for audio applications.
15.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment.
16.0 Demonstrate understanding of requirements for set-up and operation of a sound reinforcement system.
17.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry.
18.0 Demonstrate basic operation of a digital audio workstation.
19.0 Demonstrate basic digital production skills.
20.0 Use information technology tools.
21.0 Describe the importance of professional ethics and legal responsibilities.
22.0 Demonstrate personal money-management concepts, procedures, and strategies.
23.0 Demonstrate advanced digital production skills.
24.0 Perform transaction with music industry suppliers.
25.0 Plan, coordinate and manage an audio broadcast or album.
26.0 Demonstrate knowledge of legal issues of copyright.
27.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems and the larger environment.
28.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
29.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Audio Production**
PSAV Number: **I100230**

Course Number: RTT0522
Occupational Completion Point: A
Broadcast Announcer – 150 Hours – SOC Code 27-3011

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
- 01.01 Verbalize the rules and operation of school and class.
- 01.02 State the nature of the instruction.
- 01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

02.0 Demonstrate an ability to operate an audio console -- The student will be able to:
- 02.01 Demonstrate an ability to control the audio console during the recording of a show or program. Combine all the sound elements on to tape, compact disc or broadcast.
- 02.02 Route outside organizations through the audio console or computer.
- 02.03 Demonstrate application of appropriate recording mix while adjusting audio levels.
- 02.04 Demonstrate the ability to keep program on time according to the production plan.
- 02.05 Perform to high standards in the role of audio console operator in varied format situations.
- 02.06 Demonstrate a knowledge of the audio console signal flow.

03.0 Demonstrate a knowledge of production writing -- The student will be able to:
- 03.01 Explain the job of a copywriter and outline the elements of good copy and copy writing.
- 03.02 Demonstrate ability to write commercial copy in its various forms.
- 03.03 Demonstrate ability to write a production plan for a show.
- 03.04 Demonstrate ability to write lyrics for a song or jingle.
- 03.05 Demonstrate ability to write show intros, outros and bumpers.

04.0 Demonstrate news-writing skills -- The student will be able to:
- 04.01 Differentiate between news, commentary, and editorials.
- 04.02 Demonstrate ability to mark, edit, and present news in an acceptable manner.
- 04.03 Explain the various sources of news and how they are used.
- 04.04 List the elements that constitute news materials and evaluate them.
- 04.05 Demonstrate ability to write news stories in broadcast style.

05.0 Demonstrate appropriate voice-over skills -- The student will be able to:
- 05.01 Demonstrate the ability to read aloud in a professional broadcast manner.
- 05.02 Modify their reading speed as required to properly complete their assignment in the available time.
- 05.03 Demonstrate the ability to receive and properly act upon direction given by the commercial producer.

05.04 Understand the concept of voice acting and playing a role while speaking.
05.05 Perform the various assignments in a professional manner according to industry standards.

06.0 Demonstrate appropriate on-air skills -- The student will be able to:
06.01 State the characteristics of various microphones and demonstrate the ability to use them.
06.02 Handle outside organizations through the console.
06.03 Demonstrate how to handle changes in show format during a recording or live broadcast.
06.04 Perform the various assignments in a professional manner according to industry standards.
06.05 List the elements and procedures of log keeping.

07.0 Demonstrate appropriate broadcast speaking manner -- The student will be able to:
07.01 Identify and correct verbal deficiencies in themselves and others.
07.02 Demonstrate ability to breathe properly, control their voice relating to projection, loudness, and resonance, and vary tone, pitch and pacing.
07.03 Articulate and pronounce words according to accepted standards.
07.04 Read aloud in a professional broadcast manner.
07.05 Outline the qualifications and requirements of an announcer.
07.06 Demonstrate development of the skills of announcing, the various techniques of delivery and procedures according to accepted standards.

08.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
08.01 Demonstrate knowledge of arithmetic operations. AF3.2
08.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
08.03 Construct charts/tables/graphs using functions and data. AF3.5

09.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
09.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
09.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

10.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
10.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
10.02 Locate, organize and reference written information from various sources. CM 3.0
10.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
10.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
10.05 Apply active listening skills to obtain and clarify information. CM 7.0
10.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
10.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

11.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
11.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4

11.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
11.03 Present information formally and informally for specific purposes and audiences. AF2.9

12.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
12.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
12.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
12.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
12.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

13.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
13.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
13.02 Explain emergency procedures to follow in response to workplace accidents.
13.03 Create a disaster and/or emergency response plan. SHE 2.0

Course Number: RTT0523
Occupational Completion Point: B
Audio Equipment Technician – 300 Hours – SOC Code 27-4011

14.0 Demonstrate set-up and configuration of a computer for audio applications -- The student will be able to:
14.01 Install basic peripheral devices related to audio programs.
14.02 Install and configure software related to audio programs.
14.03 Demonstrate basic knowledge of computer system requirements.
14.04 Demonstrate basic knowledge of installing plug-ins or additional audio source material such as beats and or samples.
14.05 Understand the signal flow of a digital audio workstation.

15.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment -- The student will be able to:
15.01 Assess the audio technology needs of a music production (Pre-Production).
15.02 Evaluate available audio resources.
15.03 Select and configure appropriate hardware and software.

16.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system -- The student will be able to:
16.01 Demonstrate basic understanding of audio electronics (head room, biasing, distortion, equalization, frequency response, etc.).
16.02 Demonstrate basic understanding of acoustics.
16.03 Demonstrate knowledge of principles of operation of analog/digital devices (block diagram).
16.04 Demonstrate basic understanding of audio signal flow in an analog or digital chain.

16.05 Formulate strategies for audio reinforcement of music productions.
16.06 Evaluate performance needs.
16.07 Evaluate technical needs as appropriate to given spaces.
16.08 Configure a sound reinforcement system to meet performance needs.
16.09 Analyze various audio qualities to achieve proper sound mix.
16.10 Perform transactions with audio suppliers.
16.11 Design a plot for proper microphone and speaker selection and placement.
16.12 Evaluate the quality of multi-track recording.
16.13 Interpret audio needs for end user.
16.14 Supervise equipment operator.
16.15 Evaluate quality of the final mix to industry standards.

17.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry -- The student will be able to:
17.01 Demonstrate an understanding of MIDI.
17.02 Utilize a computer and multiple MIDI instruments.
17.03 Record a single sound track; add multiple sound tracks, and change MIDI voices using the software.

18.0 Demonstrate basic operation of a digital audio workstation -- The student will be able to:
18.01 Demonstrate knowledge of the digital audio workstation interface.
18.02 Create and arrange a multi-track project.
18.03 Create interest and effect using editing techniques
18.04 Design and edit audio using a waveform editor.
18.05 Record audio directly to the digital audio workstation.
18.06 Demonstrate knowledge of mixing audio.
18.07 Demonstrate skill in using audio effects and plug-ins.
18.08 Prepare an audio project for finishing and final mix down.
18.09 Transfer audio files between various audio software applications.
18.10 Record finished audio to tape or compact disc and or publish to a webpage.

19.0 Demonstrate basic digital production skills -- The student will be able to:
19.01 Demonstrate understanding of digital audio storage concepts and digital storage media.
19.02 Demonstrate knowledge of and the ability to operate digital recording decks, and other digital storage devices.
19.03 Demonstrate a working familiarity and understanding of the function and operation of digital audio workstations.
19.04 Demonstrate ability to edit, cut, erase, and insert sound utilizing various digital production techniques.

20.0 Use information technology tools--The students will be able to:
20.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
20.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
20.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
20.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

21.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 21.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 21.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 21.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 21.04 Interpret and explain written organizational policies and procedures. ELR 2.0

22.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
- 22.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 22.02 Describe the effect of money management on personal and career goals. FL 3.0
- 22.03 Develop a personal budget and financial goals. FL3.1
- 22.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 22.05 Maintain financial records. FL3.3
- 22.06 Read and reconcile financial statements. FL3.4
- 22.07 Research, compare and contrast investment opportunities.

Course Number: RTT0524
Occupational Completion Point: C
Sound Engineering Technician – 300 Hours – SOC Code 27-4014

15.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment -- The student will be able to:
- 15.03 Formulate strategies for producing multi-track recording.
- 15.04 Evaluate production needs for microphone applications.
- 15.05 Demonstrate proficiency with multi-track, multi-channeled mixing consoles.
- 15.06 Formulate strategies for electronic editing.
- 15.07 Configure audio recording systems for optimal and appropriate use of signal processing equipment.
- 15.08 Engineer a recording session and prepare appropriate documentation.
- 15.09 Mix multi-track recording.
- 15.10 Configure audio equipment for optimal musical mix.
- 15.11 Create a mixing plan.
- 15.12 Evaluate the quality of multi-track recording.
- 15.13 Interpret audio needs for end user.
- 15.14 Supervise equipment operator.
- 15.15 Evaluate quality of the final mix to industry standards.

17.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry -- The student will be able to:
- 17.04 Demonstrate proficiency in using MIDI instruments to record sounds using a digital sampler.
- 17.05 Demonstrate an understanding of MIDI and other control protocol in the recording studio.
- 17.06 Configure MIDI and other show control devices in the studio or live environment.
- 17.07 Troubleshoot MIDI and control communication problems.

23.0 Demonstrate advanced digital production skills -- The student will be able to:
- 23.01 Demonstrate knowledge of and the ability to perform digital transfers of audio information between digital and analog production environments.
- 23.02 Demonstrate a working familiarity and understanding of the function and operation of multi-track digital audio workstations.
- 23.03 Demonstrate an ability to edit, cut, erase, and insert sound utilizing various digital production techniques in the multi-track digital environment.

Course Number: RTT0525
Occupational Completion Point: D
Broadcast Technician – 300 Hours – SOC Code 27-4012

23.0 Demonstrate advanced digital production skills -- The student will be able to:
- 23.04 Demonstrate knowledge and ability to connect the hardware for a digital audio workstation, an audio console, various recording equipment together using proper signal flow techniques, cables and connectors.
- 23.05 Demonstrate knowledge and ability to record, edit and encode a surround sound digital mix for use on DVD or SACD.
- 23.06 Demonstrate knowledge and ability to encode audio for use on the web, digital distribution, use in video and animation.
- 23.07 Demonstrate knowledge and ability to create album cover art for CD and web distribution.
- 23.08 Demonstrate knowledge and ability to create a blog page to post Internet broadcast.
- 23.09 Demonstrate understanding of RSS feeds to be used to distribute digital content to Internet subscribers and to build and audience.
- 23.10 Formulate a marketing strategy for internet broadcast, independent CD release, or internet distribution.

24.0 Perform transactions with music industry suppliers -- The student will be able to:
- 24.01 Research sources for needed equipment, supplies and educational materials.
- 24.02 Differentiate the levels of quality in the hierarchy of manufacturers, distributors and suppliers.
- 24.03 Evaluate purchasing agreements including bids, warranties, and maintenance contracts.
- 24.04 Evaluate the technical specifications of audio related products.
- 24.05 Execute the purchase of audio equipment, supplies and educational materials.

25.0 Plan, coordinate and manage an audio broadcast or album -- The student will be able to:
- 25.01 Define the program format and market demographics.
- 25.02 Present a project proposal with script or lyrics.
- 25.03 Develop a production schedule.
- 25.04 Create a plan to acquire all needed production resources and talent.
- 25.05 Manage crew and staff during pre-production and production.
- 25.06 Determine post-production requirements.
- 25.07 Determine post-production activities.
- 25.08 Conduct client approval reviews of project.
- 25.09 Archive and manage finished assets and originals.
- 25.10 Oversee broadcast/internet distribution or physical distribution to market.
- 25.11 Explain various techniques for program or segments promotion.

26.0 Demonstrate knowledge of legal issues of copyright -- The student will be able to:

26.04 Define all Federal Communications Commission regulations pertaining to the broadcasting industry.
26.05 Define the laws and regulations pertaining to the ownership and control of media assets, license allocation, measurement and records, political broadcasts and lottery laws.
26.06 Define the laws and practices underlying rights, releases and permits.
26.07 Define the laws and practices underlying slander, libel, free speech and “truth in advertising” issues.
26.08 Define the laws and practices underlying indecent programming, obscenity and censorship issues.
26.09 Define the laws and practices underlying contract, labor issues, copyright and insurance/liability issues.

27.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

27.05 Describe the nature and types of business organizations. SY 1.0
27.06 Explain the effect of key organizational systems on performance and quality.
27.07 List and describe quality control systems and/or practices common to the workplace. SY 2.0
27.08 Explain the impact of the global economy on business organizations. HE 2.0

28.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

28.05 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
28.06 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
28.07 Conduct and participate in meetings to accomplish work tasks. LT 4.0
28.08 Employ mentoring skills to inspire and teach others. LT 5.0

29.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

29.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
29.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
29.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
29.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
29.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
29.06 Identify and exhibit traits for retaining employment. ECD 7.0
29.07 Identify opportunities and research requirements for career advancement. ECD 8.0
29.08 Research the benefits of ongoing professional development. ECD 9.0
29.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 1**
Course Number: **8772310**
Course Credit: **1**

Course Description:

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
- 01.01 Verbalize the rules and operation of school and class.
- 01.02 State the nature of the instruction.
- 01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

02.0 Demonstrate an ability to operate an audio console -- The student will be able to:
- 02.01 Demonstrate an ability to control the audio console during the recording of a show or program. Combine all the sound elements on to tape, compact disc or broadcast.
- 02.02 Route outside organizations through the audio console or computer.
- 02.03 Demonstrate application of appropriate recording mix while adjusting audio levels.
- 02.04 Demonstrate the ability to keep program on time according to the production plan.
- 02.05 Perform to high standards in the role of audio console operator in varied format situations.
- 02.06 Demonstrate knowledge of the audio console signal flow.

03.0 Demonstrate a knowledge of production writing -- The student will be able to:
- 03.01 Explain the job of a copywriter and outline the elements of good copy and copy writing.
- 03.02 Demonstrate ability to write commercial copy in its various forms.
- 03.03 Demonstrate ability to write a production plan for a show.
- 03.04 Demonstrate ability to write lyrics for a song or jingle.
- 03.05 Demonstrate ability to write show intros, outros and bumpers.

04.0 Demonstrate news-writing skills -- The student will be able to:
- 04.01 Differentiate between news, commentary, and editorials.
- 04.02 Demonstrate ability to mark, edit, and present news in an acceptable manner.
- 04.03 Explain the various sources of news and how they are used.
- 04.04 List the elements that constitute news materials and evaluate them.
- 04.05 Demonstrate ability to write news stories in broadcast style.

05.0 Demonstrate appropriate voice-over skills -- The student will be able to:
- 05.01 Demonstrate the ability to read aloud in a professional broadcast manner.
- 05.02 Modify their reading speed as required to properly complete their assignment in the available time.
- 05.03 Demonstrate the ability to receive and properly act upon direction given by the commercial producer.
- 05.04 Understand the concept of voice acting and playing a role while speaking.

05.05 Perform the various assignments in a professional manner according to industry standards.

06.0 Demonstrate appropriate on-air skills -- The student will be able to:

06.01 State the characteristics of various microphones and demonstrate the ability to use them.
06.02 Handle outside organizations through the console.
06.03 Demonstrate how to handle changes in show format during a recording or live broadcast.
06.04 Perform the various assignments in a professional manner according to industry standards.
06.05 List the elements and procedures of log keeping.

07.0 Demonstrate appropriate broadcast speaking manner -- The student will be able to:

07.01 Identify and correct verbal deficiencies in themselves and others.
07.02 Demonstrate ability to breathe properly, control their voice relating to projection, loudness, and resonance, and vary tone, pitch and pacing.
07.03 Articulate and pronounce words according to accepted standards.
07.04 Read aloud in a professional broadcast manner.
07.05 Outline the qualifications and requirements of an announcer.
07.06 Demonstrate development of the skills of announcing, the various techniques of delivery and procedures according to accepted standards.

08.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0

08.01 Demonstrate knowledge of arithmetic operations. AF3.2
08.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
08.03 Construct charts/tables/graphs using functions and data. AF3.5

09.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0

09.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
09.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

10.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

10.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
10.02 Locate, organize and reference written information from various sources. CM 3.0
10.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
10.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
10.05 Apply active listening skills to obtain and clarify information. CM 7.0
10.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
10.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

11.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0

11.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4

11.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
11.03 Present information formally and informally for specific purposes and audiences. AF2.9

12.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
12.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
12.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
12.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
12.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

13.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
13.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
13.02 Explain emergency procedures to follow in response to workplace accidents.
13.03 Create a disaster and/or emergency response plan. SHE 2.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 2**
Course Number: **8772320**
Course Credit: **1**

Course Description:

14.0 Demonstrate set-up and configuration of a computer for audio applications -- The student will be able to:
  14.01 Install basic peripheral devices related to audio programs.
  14.02 Install and configure software related to audio programs.
  14.03 Demonstrate basic knowledge of computer system requirements.
  14.04 Demonstrate basic knowledge of installing plug-ins or additional audio source material such as beats and or samples.
  14.05 Understand the signal flow of a digital audio workstation.

15.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment -- The student will be able to:
  15.01 Assess the audio technology needs of a music production (Pre-Production).
  15.02 Evaluate available audio resources.
  15.03 Select and configure appropriate hardware and software.

16.0 Demonstrate understanding of requirements for set up and operation of a sound reinforcement system -- The student will be able to:
  16.01 Demonstrate basic understanding of audio electronics (head room, biasing, distortion, equalization, frequency response, etc.).
  16.02 Demonstrate basic understanding of acoustics.
  16.03 Demonstrate knowledge of principles of operation of analog/digital devices (block diagram).
  16.04 Demonstrate basic understanding of audio signal flow in an analog or digital chain.
  16.05 Formulate strategies for audio reinforcement of music productions.
  16.06 Evaluate performance needs.
  16.07 Evaluate technical needs as appropriate to given spaces.
  16.08 Configure a sound reinforcement system to meet performance needs.
  16.09 Analyze various audio qualities to achieve proper sound mix.
  16.10 Perform transactions with audio suppliers.
  16.11 Design a plot for proper microphone and speaker selection and placement.
  16.12 Evaluate the quality of multi-track recording.
  16.13 Interpret audio needs for end user.
  16.14 Supervise equipment operator.
  16.15 Evaluate quality of the final mix to industry standards.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 3**
Course Number: **8772330**
Course Credit: **1**

17.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry -- The student will be able to:
- 17.01 Demonstrate an understanding of MIDI.
- 17.02 Utilize a computer and multiple MIDI instruments.
- 17.03 Record a single sound track; add multiple sound tracks, and change MIDI voices using the software.

18.0 Demonstrate basic operation of a digital audio workstation -- The student will be able to:
- 18.01 Demonstrate knowledge of the digital audio workstation interface.
- 18.02 Create and arrange a multi-track project.
- 18.03 Create interest and effect using editing techniques
- 18.04 Design and edit audio using a waveform editor.
- 18.05 Record audio directly to the digital audio workstation.
- 18.06 Demonstrate knowledge of mixing audio.
- 18.07 Demonstrate skill in using audio effects and plug-ins.
- 18.08 Prepare an audio project for finishing and final mix down.
- 18.09 Transfer audio files between various audio software applications.
- 18.10 Record finished audio to tape or compact disc and or publish to a webpage.

19.0 Demonstrate basic digital production skills -- The student will be able to:
- 19.01 Demonstrate understanding of digital audio storage concepts and digital storage media.
- 19.02 Demonstrate knowledge of and the ability to operate digital recording decks, and other digital storage devices.
- 19.03 Demonstrate a working familiarity and understanding of the function and operation of digital audio workstations.
- 19.04 Demonstrate ability to edit, cut, erase, and insert sound utilizing various digital production techniques.

20.0 Use information technology tools--The students will be able to:
- 20.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 20.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 20.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 20.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

21.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 21.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 21.02 Evaluate alternative responses to workplace situations based on personal,

21.03 professional, ethical, legal responsibilities, and employer policies. ELR1.1
21.04 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
21.05 Interpret and explain written organizational policies and procedures. ELR 2.0

22.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

22.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
22.02 Describe the effect of money management on personal and career goals. FL 3.0
22.03 Develop a personal budget and financial goals. FL3.1
22.04 Complete financial instruments for making deposits and withdrawals. FL3.2
22.05 Maintain financial records. FL3.3
22.06 Read and reconcile financial statements. FL3.4
22.07 Research, compare and contrast investment opportunities.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 4**
Course Number: **8772340**
Course Credit: **1**

Course Description:

15.0 Understand the operation of basic reproduction, reinforcement and recording audio equipment -- The student will be able to:
- 15.01 Formulate strategies for producing multi-track recording.
- 15.02 Evaluate production needs for microphone applications.
- 15.03 Demonstrate proficiency with multi-track, multi-channeled mixing consoles.
- 15.04 Formulate strategies for electronic editing.
- 15.05 Configure audio recording systems for optimal and appropriate use of signal processing equipment.
- 15.06 Engineer a recording session and prepare appropriate documentation.
- 15.07 Mix multi-track recording.
- 15.08 Configure audio equipment for optimal musical mix.
- 15.09 Create a mixing plan.
- 15.10 Evaluate the quality of multi-track recording.
- 15.11 Interpret audio needs for end user.
- 15.12 Supervise equipment operator.
- 15.13 Evaluate quality of the final mix to industry standards.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 5**
Course Number: **8772350**
Course Credit: **1**

Course Description:

17.0 Demonstrate application of control protocols and their relationship to equipment used in the music industry -- The student will be able to:
- 17.04 Demonstrate proficiency in using MIDI instruments to record sounds using a digital sampler.
- 17.05 Demonstrate an understanding of MIDI and other control protocol in the recording studio.
- 17.06 Configure MIDI and other show control devices in the studio or live environment.
- 17.07 Troubleshoot MIDI and control communication problems.

23.0 Demonstrate advanced digital production skills -- The student will be able to:
- 23.01 Demonstrate knowledge of and the ability to perform digital transfers of audio information between digital and analog production environments.
- 23.02 Demonstrate a working familiarity and understanding of the function and operation of multi-track digital audio workstations.
- 23.03 Demonstrate an ability to edit, cut, erase, and insert sound utilizing various digital production techniques in the multi-track digital environment.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 6**
Course Number: **8772360**
Course Credit: **1**

Course Description:

23.0 Demonstrate advanced digital production skills -- The student will be able to:
  23.04 Demonstrate knowledge and ability to connect the hardware for a digital audio workstation, an audio console, various recording equipment together using proper signal flow techniques, cables and connectors.
  23.05 Demonstrate knowledge and ability to record, edit and encode a surround sound digital mix for use on DVD or SACD.
  23.06 Demonstrate knowledge and ability to encode audio for use on the web, digital distribution, use in video and animation.
  23.07 Demonstrate knowledge and ability to create album cover art for CD and web distribution.
  23.08 Demonstrate knowledge and ability to create a blog page to post Internet broadcast.
  23.09 Demonstrate understanding of RSS feeds to be used to distribute digital content to Internet subscribers and to build and audience.
  23.10 Formulate a marketing strategy for internet broadcast, independent CD release, or internet distribution.

24.0 Perform transactions with music industry suppliers -- The student will be able to:
  24.04 Research sources for needed equipment, supplies and educational materials.
  24.05 Differentiate the levels of quality in the hierarchy of manufacturers, distributors and suppliers.
  24.06 Evaluate purchasing agreements including bids, warranties, and maintenance contracts.
  24.07 Evaluate the technical specifications of audio related products.
  24.08 Execute the purchase of audio equipment, supplies and educational materials.

Florida Department of Education
Student Performance Standards

Course Title: **Digital Audio Production 7**
Course Number: **8772370**
Course Credit: **1**

Course Description:

25.0 Plan, coordinate and manage an audio broadcast or album -- The student will be able to:
  25.04 Define the program format and market demographics.
  25.05 Present a project proposal with script or lyrics.
  25.06 Develop a production schedule.
  25.07 Create a plan to acquire all needed production resources and talent.
  25.08 Manage crew and staff during pre-production and production.
  25.09 Determine post-production requirements.
  25.10 Determine post-production activities.
  25.11 Conduct client approval reviews of project.
  25.12 Archive and manage finished assets and originals.
  25.13 Oversee broadcast/internet distribution or physical distribution to market.
  25.14 Explain various techniques for program or segments promotion.

26.0 Demonstrate knowledge of legal issues of copyright -- The student will be able to:
  26.04 Define all Federal Communications Commission regulations pertaining to the broadcasting industry.
  26.05 Define the laws and regulations pertaining to the ownership and control of media assets, license allocation, measurement and records, political broadcasts and lottery laws.
  26.06 Define the laws and practices underlying rights, releases and permits.
  26.07 Define the laws and practices underlying slander, libel, free speech and “truth in advertising” issues.
  26.08 Define the laws and practices underlying indecent programming, obscenity and censorship issues.
  26.09 Define the laws and practices underlying contract, labor issues, copyright and insurance/liability issues.

27.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
  27.05 Describe the nature and types of business organizations. SY 1.0
  27.06 Explain the effect of key organizational systems on performance and quality.
  27.07 List and describe quality control systems and/or practices common to the workplace. SY 2.0
  27.08 Explain the impact of the global economy on business organizations. HE 2.0

28.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
  28.05 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
  28.06 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
  28.07 Conduct and participate in meetings to accomplish work tasks. LT 4.0

28.08 Employ mentoring skills to inspire and teach others. LT 5.0

29.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

29.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
29.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
29.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
29.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
29.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
29.06 Identify and exhibit traits for retaining employment. ECD 7.0
29.07 Identify opportunities and research requirements for career advancement. ECD 8.0
29.08 Research the benefits of ongoing professional development. ECD 9.0
29.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Video Production**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	Secondary	PSAV
Program Number	8772400	I100240
CIP Number	0610.010222	0610.010222
Grade Level	9-12, 30, 31	30, 31
Standard Length	10 Credits	1500 Hours
Teacher Certification	TEC ELEC ¶ 7 ¶ G TV PRO TEC @7 G I ART-TEC 1@2 TEC ED 1 @ 2	TEC ELEC ¶ 7 ¶ G TV PRO TEC @7 G I ART-TEC 1@2 TEC ED 1 @ 2
CTSO	SkillsUSA	SkillsUSA
SOC Codes (all applicable)	27-4011	27-4011
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)	
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm	
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp	
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp	
Basic Skills Level	N/A	Mathematics: 9 Language: 9 Reading: 9

Purpose

The purpose of this program is to prepare students for initial employment as production assistants, audio/video equipment technician, video/TV camera operators, video editors, multi-media artists/animators and broadcast technicians.

The content should include, but is not be limited to, communication skills; leadership skills; human relations and employability skills; safe and efficient work practices; and preparation to assume responsibility for overall production of digital video activities including: scripts, lighting, camera operation, electronic news gathering, field/studio production, and video editing.

All outcomes must be completed to receive credit for an Occupational Completion Point (OCP). Listed below are the courses that comprise this program when offered at the secondary level.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of six Occupational Completion Points.

When offered at the post secondary level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44 (3)(b), F.S.

The following table illustrates the **PSAV** program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	RTT0530	Digital Video Fundamentals	150 Hours	27-4011
B	RTT0531	Audio and Video Equipment Technician	150 Hours	27-4011
C	RTT0532	Camera Operator	300 Hours	27-4031
D	RTT0533	Video Editor	300 Hours	27-4032
E	RTT0534	Multi-media Artist and Animator	300 Hours	27-1014
F	RTT0525	Broadcast Technician	300 Hours	27-4012

The following table illustrates the **Secondary** program structure:

OCP	Course Number	Course Title	Length	SOC Code	Level
A	8772410	Digital Video Production 1	1 Credit	27-4011	2
B	8772420 8772430	Digital Video Production 2 Digital Video Production 3	1 Credit 1 Credit	27-4011	2 2
C	8772440 8772450	Digital Video Production 4 Digital Video Production 5	1 Credit 1 Credit	27-4031	2 2
D	8772460 8772470	Digital Video Production 6 Digital Video Production 7	1 Credit 1 Credit	27-4032	2 2
E	8772480 8772490	Digital Video Production 8 Digital Video Production 9	1 Credit 1 Credit	27-1014	2 2
F	8772491	Digital Video Production 10	1 Credit	27-4012	2

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C., the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

The PSAV component of this program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on statewide articulation agreements which correlate to programs and industry certifications, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Bright Futures/Gold Seal Scholarship

Course substitutions as defined in the Comprehensive Course Table for this program area may be used to qualify a student for Florida's Gold Seal Vocational Scholarship, providing all other eligibility requirements are met. Eligibility requirements are available online at https://www.osfaffelp.org/bfiehs/fnbpcm02_CCTMain.aspx.

Fine Arts/Practical Arts Credit

Many courses in CTE programs meet the Fine Arts/Practical Arts credit for high school graduation. For additional information refer to http://www.fldoe.org/schools/pdf/ListPracticalArtsCourses.pdf.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate safe and efficient work practices.
02.0 Develop a project proposal and script.
03.0 Generate a production schedule.
04.0 Plan a production set.
05.0 Create appropriate lighting for location and/or set productions.
06.0 Operate a video camera.
07.0 Shoot studio and/or location footage.
08.0 Record, mix and edit audio resources.
09.0 Operate control room equipment.
10.0 Organize and edit video resources.
11.0 Design and generate graphic elements.
12.0 Plan, coordinate and manage a video or webcast production.
13.0 Demonstrate appropriate math skills.
14.0 Demonstrate mathematics knowledge and skills.
15.0 Demonstrate an appropriate understanding of basic science.
16.0 Demonstrate science knowledge and skills.
17.0 Explain the importance of employability and entrepreneurship skills.
18.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
19.0 Demonstrate language arts knowledge and skills.
20.0 Solve problems using critical thinking skills, creativity and innovation.
21.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
22.0 Use information technology tools.
23.0 Describe the importance of professional ethics and legal responsibilities.
24.0 Demonstrate personal money-management concepts, procedures, and strategies.
25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Digital Video Production
PSAV Number: I100240

Course Number: RTT0530
Occupational Completion Point: A
Digital Video Fundamentals – 150 Hours – SOC Code 27-4011

02.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 02.01 Follow industry safety rules, regulations and policies.
- 02.02 Demonstrate proper handling of hazardous materials.
- 02.03 Demonstrate awareness of appropriate ergonomics.
- 02.04 Demonstrate proper care of equipment.
- 02.05 Demonstrate appropriate use of equipment in an efficient manner.

06.0 Plan a production set -- The student will be able to:
- 06.01 Define set requirements for program type.
- 06.02 Define needed prop, costume and other resources.
- 06.03 Acquire appropriate locations for segment type.

07.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
- 07.01 Determine appropriate lighting needs for production settings.
- 07.02 Identify locations and studio lighting types, method of use and application.
- 07.03 Use lighting equipment according to industry safety standards.
- 07.04 Define light quality in terms of intensity, color, direction and characteristics.

08.0 Operate a video camera -- The student will be able to:
- 08.01 Use current industry standard production video equipment.
- 08.02 Operate camera in studio and location (field) production environments.

10.0 Record, mix and edit audio resources -- The student will be able to:
- 10.01 Identify and select microphones for production needs.
- 10.02 Determine optimal microphone placement.
- 10.03 Establish appropriate recording conditions.

11.0 Operate control room equipment -- The student will be able to:
- 11.01 Define control room functions in a production.

12.0 Organize and edit video resources -- The student will be able to:
- 12.01 Log and organize video resources.
- 12.02 Input video resources into post-production equipment and workflow.

14.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 14.04 Demonstrate knowledge of arithmetic operations. AF3.2
- 14.05 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4

14.06 Construct charts/tables/graphs using functions and data. AF3.5

15.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
15.04 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
15.05 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

19.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
19.04 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
19.05 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
19.06 Present information formally and informally for specific purposes and audiences. AF2.9

20.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
20.04 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
20.05 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
20.06 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
20.07 Conduct technical research to gather information necessary for decision-making. PS 4.0

21.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
21.04 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
21.05 Explain emergency procedures to follow in response to workplace accidents.
21.06 Create a disaster and/or emergency response plan. SHE 2.0

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
25.04 Describe the nature and types of business organizations. SY 1.0
25.05 Explain the effect of key organizational systems on performance and quality.
25.06 List and describe quality control systems and/or practices common to the workplace. SY 2.0
25.07 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
26.04 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
26.05 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
26.06 Conduct and participate in meetings to accomplish work tasks. LT 4.0
26.07 Employ mentoring skills to inspire and teach others. LT 5.0

Course Number: RTT0531
Occupational Completion Point: B
Audio and Video Equipment Technician -- 150 Hours -- SOC 27-4011

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

03.0 Generate a production schedule -- The student will be able to:
- 03.04 Define the segment or program type.
- 03.05 Identify production resources needed.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
- 05.04 Determine appropriate lighting needs for production settings.
- 05.05 Identify locations and studio lighting types, method of use and application.
- 05.06 Use lighting equipment according to industry safety standards.
- 05.07 Light a location set with ambient/available and supplemental lighting.

06.0 Operate a video camera -- The student will be able to:
- 06.04 Use current industry standard production video equipment.
- 06.05 Operate camera in studio and location (field) production environments.

08.0 Record, mix and edit audio resources -- The student will be able to:
- 08.04 Identify and select microphones for production needs.
- 08.05 Determine optimal microphone placement.
- 08.06 Establish appropriate recording conditions.
- 08.07 Set up audio recording equipment.
- 08.08 Perform appropriate pre-production check of production equipment.
- 08.09 Record location sound.
- 08.10 Record studio live sound.

09.0 Operate control room equipment -- The student will be able to:
- 09.04 Define control room functions in a production.
- 09.05 Use the audio console (mixer) in a production.
- 09.06 Operate camera switching and traffic control equipment.

10.0 Organize and edit video resources -- The student will be able to:
- 10.04 Log and organize video resources.
- 10.05 Input video resources into post-production equipment and workflow.
- 10.06 Operate editing hardware and software.
- 10.07 Perform assemble edits for appropriate effect.
- 10.08 Perform insert edits for appropriate effect.

18.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

18.04 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
18.05 Locate, organize and reference written information from various sources. CM 3.0
18.06 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
18.07 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
18.08 Apply active listening skills to obtain and clarify information. CM 7.0
18.09 Develop and interpret tables and charts to support written and oral communications. CM 8.0
18.10 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

22.0 Use information technology tools--The students will be able to:
22.04 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
22.05 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
22.06 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
22.07 Employ collaborative/groupware applications to facilitate group work. IT 4.0

23.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
23.04 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
23.05 Evaluate alternative responses to workplace situations based on personal,
23.06 professional, ethical, legal responsibilities, and employer policies. ELR1.1
23.07 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
23.08 Interpret and explain written organizational policies and procedures. ELR 2.0

24.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
24.04 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
24.05 Describe the effect of money management on personal and career goals. FL 3.0
24.06 Develop a personal budget and financial goals. FL3.1
24.07 Complete financial instruments for making deposits and withdrawals. FL3.2
24.08 Maintain financial records. FL3.3
24.09 Read and reconcile financial statements. FL3.4
24.10 Research, compare and contrast investment opportunities.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
25.04 Describe the nature and types of business organizations. SY 1.0
25.05 Explain the effect of key organizational systems on performance and quality.
25.06 List and describe quality control systems and/or practices common to the workplace. SY 2.0
25.07 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
  26.04 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
  26.05 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
  26.06 Conduct and participate in meetings to accomplish work tasks. LT 4.0
  26.07 Employ mentoring skills to inspire and teach others. LT 5.0

Course Number: RTT0532
Occupational Completion Point: C
Camera Operator – 300 Hours -- SOC 27-4031

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
  01.01 Follow industry safety rules, regulations and policies.
  01.02 Demonstrate proper handling of hazardous materials.
  01.03 Demonstrate awareness of appropriate ergonomics.
  01.04 Demonstrate proper care of equipment.
  01.05 Demonstrate appropriate use of equipment in an efficient manner.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
  05.04 Determine appropriate lighting needs for production settings.
  05.05 Identify locations and studio lighting types, method of use and application.
  05.06 Use lighting equipment according to industry safety standards.
  05.07 Use lighting for effect to control mood and impact in production settings.

06.0 Operate a video camera -- The student will be able to:
  06.04 Use current industry standard production video equipment.
  06.05 Operate camera in studio and location (field) production environments.
  06.06 Align camera for studio production.
  06.07 Demonstrate appropriate framing for both SDTV and HDTV.

07.0 Shoot studio and/or location footage -- The student will be able to:
  07.04 Plan a shot to obtain required action/footage.
  07.05 Demonstrate appropriate shot sequences, transitions and post production (edit) effects.
  07.06 Control camera movement to obtain required effects.
  07.07 Control lens, focal length, aperture and exposure to obtain required effects.
  07.08 Set up camera and recording equipment sequence.
  08.01 Perform appropriate pre-production checks of equipment function.
  08.02 Perform basic routine, preventative and repair maintenance on video equipment.
  08.03 Define the various recording formats and media.
  08.04 Define appropriate digital compression and signal (file) types.

08.0 Record, mix and edit audio resources -- The student will be able to:
  08.04 Record location sound.
  08.05 Record studio live sound.

10.0 Organize and edit video resources -- The student will be able to:
  10.01 Log and organize video resources.
  10.02 Input video resources into post-production equipment and workflow.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.04 Describe the nature and types of business organizations. SY 1.0
- 25.05 Explain the effect of key organizational systems on performance and quality.
- 25.06 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.07 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.04 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.05 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.06 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.07 Employ mentoring skills to inspire and teach others. LT 5.0

Course Number: RTT0533
Occupational Completion Point: D
Video Editor – 300 Hours -- SOC 27-4032

02.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 02.01 Follow industry safety rules, regulations and policies.
- 02.02 Demonstrate proper handling of hazardous materials.
- 02.03 Demonstrate awareness of appropriate ergonomics.
- 02.04 Demonstrate proper care of equipment.
- 02.05 Demonstrate appropriate use of equipment in an efficient manner.

03.0 Generate a production schedule -- The student will be able to:
- 03.01 Define the segment or program type.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
- 05.01 Use lighting equipment according to industry safety standards.

08.0 Record, mix and edit audio resources -- The student will be able to:
- 08.04 Perform sound edits and enhancements.

10.0 Organize and edit video resources -- The student will be able to:
- 10.01 Log and organize video resources.
- 10.02 Input video resources into post-production equipment and workflow.
- 10.03 Operate editing hardware and software.
- 10.04 Perform assemble edits for appropriate effect.
- 10.05 Perform insert edits for appropriate effect.
- 10.06 Maintain continuity and production values.
- 10.07 Mix audio and video resources for final cut.
- 10.08 Apply color correction to video footage.
- 10.09 Demonstrate ability to edit in both SDTV and HDTV.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.01 Describe the nature and types of business organizations. SY 1.0
- 25.02 Explain the effect of key organizational systems on performance and quality.
- 25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.04 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

Course Number: RTT0534
Occupational Completion Point: E
Multi-Media Artist & Animator -- 300Hours -- SOC 27-1014

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

03.0 Generate a production schedule -- The student will be able to:
- 03.01 Define the segment or program type.

10.0 Organize and edit video resources -- The student will be able to:
- 10.04 Log and organize video resources.
- 10.05 Input video resources into post-production equipment and workflow.
- 10.06 Operate editing hardware and software.
- 10.07 Perform assemble edits for appropriate effect.
- 10.08 Perform insert edits for appropriate effect.
- 10.09 Maintain continuity and production values.
- 10.10 Mix audio and video resources for final cut.
- 10.11 Apply color correction to video footage.
- 10.12 Transfer finished edit to other media for distribution or archiving.

11.0 Design and generate graphic elements -- The student will be able to:
- 11.01 Determine the graphic requirements for a production.
- 11.02 Operate graphic production software.
- 11.03 Produce broadcast graphic elements for titling, credits and graphic transitions.
- 11.04 Determine the special effects need for a production.
- 11.05 Set up and operate character generator equipment and software.
- 11.06 Generate appropriate special effects and animated elements for a production.

- 11.07 Demonstrate an understanding of graphic image types, file formats, and technical requirements for a production.
- 11.08 Use image editing (bit mapped) software.
- 11.09 Edit graphics into the program or segment.
- 11.10 Demonstrate an ability to use type, color, composition and graphic elements for a specific production effect.
- 11.11 Demonstrate an ability to use different aspect ratios as needed for SDTV and HDTV.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

- 25.01 Describe the nature and types of business organizations. SY 1.0
- 25.02 Explain the effect of key organizational systems on performance and quality.
- 25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.04 Explain the impact of the global economy on business organizations.

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

Course Number: RTT0525
Occupational Completion Point: F
Broadcast Technician – 300 Hours -- SOC 27-4012

01.0 Demonstrate safe and efficient work practices -- The student will be able to:

- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

02.0 Develop a project proposal and script -- The student will be able to:

- 02.01 Identify a project goal.
- 02.02 Write a production script.
- 02.03 Develop a story-board from a script.

03.0 Generate a production schedule -- The student will be able to:

- 03.01 Define the segment or program type.
- 03.02 Identify production resources needed.
- 03.03 Establish viable production time frame targets.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
  05.01 Use studio lighting master control equipment.

06.0 Operate a video camera -- The student will be able to:
  06.01 Operate (CCU) Camera Control Unit.

09.0 Operate control room equipment -- The student will be able to:
  09.01 Use vision control equipment.
  09.02 Operate routing switcher for production and tape dubs.

10.0 Organize and edit video resources -- The student will be able to:
  10.01 Log and organize video resources.
  10.02 Input video resources into post-production equipment and workflow.

12.0 Plan, coordinate and manage a video or web class production -- The student will be able to:
  12.01 Define the program/segment format and market.
  12.02 Present a project proposal and script for approval.
  12.03 Develop a production schedule.
  12.04 Manage crew and staff during pre-planning and production.
  12.05 Determine post-production requirements.
  12.06 Coordinate post-production activities.
  12.07 Direct final production values.
  12.08 Archive and manage finished assets and originals.
  12.09 Oversee broadcast/distribution to market.
  12.10 Explain the techniques and procedures of web hosts, portals, television broadcast and cable networks, syndication and public broadcasters.

17.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
  17.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
  17.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
  17.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
  17.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
  17.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
  17.06 Identify and exhibit traits for retaining employment. ECD 7.0
  17.07 Identify opportunities and research requirements for career advancement. ECD 8.0
  17.08 Research the benefits of ongoing professional development. ECD 9.0
  17.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
  25.01 Describe the nature and types of business organizations. SY 1.0
  25.02 Explain the effect of key organizational systems on performance and quality.
  25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
  25.04 Explain the impact of the global economy on business organizations.

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

26.01	Employ leadership skills to accomplish organizational goals and objectives.	LT1.0
26.02	Establish and maintain effective working relationships with others in order to accomplish objectives and tasks.	LT3.0
26.03	Conduct and participate in meetings to accomplish work tasks.	LT 4.0
26.04	Employ mentoring skills to inspire and teach others.	LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 1**
Course Number: **8772410**
Course Credit: **1**

Course Description:

- 02.0 Demonstrate safe and efficient work practices -- The student will be able to:
  - 02.01 Follow industry safety rules, regulations and policies.
  - 02.02 Demonstrate proper handling of hazardous materials.
  - 02.03 Demonstrate awareness of appropriate ergonomics.
  - 02.04 Demonstrate proper care of equipment.
  - 02.05 Demonstrate appropriate use of equipment in an efficient manner.

- 06.0 Plan a production set -- The student will be able to:
  - 06.01 Define set requirements for program type.
  - 06.02 Define needed prop, costume and other resources.
  - 06.03 Acquire appropriate locations for segment type.

- 07.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
  - 07.01 Determine appropriate lighting needs for production settings.
  - 07.02 Identify locations and studio lighting types, method of use and application.
  - 07.03 Use lighting equipment according to industry safety standards.
  - 07.04 Define light quality in terms of intensity, color, direction and characteristics.

- 08.0 Operate a video camera -- The student will be able to:
  - 08.01 Use current industry standard production video equipment.
  - 08.02 Operate camera in studio and location (field) production environments.

- 10.0 Record, mix and edit audio resources -- The student will be able to:
  - 10.01 Identify and select microphones for production needs.
  - 10.02 Determine optimal microphone placement.
  - 10.03 Establish appropriate recording conditions.

- 11.0 Operate control room equipment -- The student will be able to:
  - 11.01 Define control room functions in a production.

- 12.0 Organize and edit video resources -- The student will be able to:
  - 12.01 Log and organize video resources.
  - 12.02 Input video resources into post-production equipment and workflow.

- 14.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
  - 14.04 Demonstrate knowledge of arithmetic operations. AF3.2
  - 14.05 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
  - 14.06 Construct charts/tables/graphs using functions and data. AF3.5

15.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 15.04 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 15.05 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

19.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 19.04 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 19.05 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 19.06 Present information formally and informally for specific purposes and audiences. AF2.9

20.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 20.04 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 20.05 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 20.06 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 20.07 Conduct technical research to gather information necessary for decision-making. PS 4.0

21.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
- 21.04 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 21.05 Explain emergency procedures to follow in response to workplace accidents.
- 21.06 Create a disaster and/or emergency response plan. SHE 2.0

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.04 Describe the nature and types of business organizations. SY 1.0
- 25.05 Explain the effect of key organizational systems on performance and quality.
- 25.06 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.07 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.04 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.05 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.06 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.07 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 2**
Course Number: **8772420**
Course Credit: **1**

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

03.0 Generate a production schedule -- The student will be able to:
- 03.04 Define the segment or program type.
- 03.05 Identify production resources needed.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
- 05.04 Determine appropriate lighting needs for production settings.
- 05.05 Identify locations and studio lighting types, method of use and application.
- 05.06 Use lighting equipment according to industry safety standards.
- 05.07 Light a location set with ambient/available and supplemental lighting.

06.0 Operate a video camera -- The student will be able to:
- 06.04 Use current industry standard production video equipment.
- 06.05 Operate camera in studio and location (field) production environments.

08.0 Record, mix and edit audio resources -- The student will be able to:
- 08.04 Identify and select microphones for production needs.
- 08.05 Determine optimal microphone placement.
- 08.06 Establish appropriate recording conditions.
- 08.07 Set up audio recording equipment.
- 08.08 Perform appropriate pre-production check of production equipment.
- 08.09 Record location sound.
- 08.10 Record studio live sound.

09.0 Operate control room equipment -- The student will be able to:
- 09.04 Define control room functions in a production.
- 09.05 Use the audio console (mixer) in a production.
- 09.06 Operate camera switching and traffic control equipment.

10.0 Organize and edit video resources -- The student will be able to:
- 10.04 Log and organize video resources.
- 10.05 Input video resources into post-production equipment and workflow.
- 10.06 Operate editing hardware and software.
- 10.07 Perform assemble edits for appropriate effect.
- 10.08 Perform insert edits for appropriate effect.

19.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

19.04 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
19.05 Locate, organize and reference written information from various sources. CM 3.0
19.06 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
19.07 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
19.08 Apply active listening skills to obtain and clarify information. CM 7.0
19.09 Develop and interpret tables and charts to support written and oral communications. CM 8.0
19.10 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

22.0 Use information technology tools--The students will be able to:

22.04 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
22.05 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
22.06 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
22.07 Employ collaborative/groupware applications to facilitate group work. IT 4.0

23.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

23.04 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
23.05 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
23.06 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
23.07 Interpret and explain written organizational policies and procedures. ELR 2.0

24.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

24.04 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
24.05 Describe the effect of money management on personal and career goals. FL 3.0
24.06 Develop a personal budget and financial goals. FL3.1
24.07 Complete financial instruments for making deposits and withdrawals. FL3.2
24.08 Maintain financial records. FL3.3
24.09 Read and reconcile financial statements. FL3.4
24.10 Research, compare and contrast investment opportunities.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 3**
Course Number: **8772430**
Course Credit: **1**

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
- 05.01 Determine appropriate lighting needs for production settings.
- 05.02 Identify locations and studio lighting types, method of use and application.
- 05.03 Use lighting equipment according to industry safety standards.
- 05.04 Use lighting for effect to control mood and impact in production settings.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.04 Describe the nature and types of business organizations. SY 1.0
- 25.05 Explain the effect of key organizational systems on performance and quality.
- 25.06 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.07 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 4**
Course Number: **8772440**
Course Credit: **1**

06.0 Operate a video camera -- The student will be able to:
- 06.01 Use current industry standard production video equipment.
- 06.02 Align camera for studio production.
- 06.03 Operate camera in studio and location (field) production environments.
- 06.04 Demonstrate appropriate framing for both SDTV and HDTV.

07.0 Shoot studio and/or location footage -- The student will be able to:
- 07.01 Plan a shot to obtain required action/footage.
- 07.02 Demonstrate appropriate shot sequences, transitions and post production (edit) effects.
- 07.03 Control camera movement to obtain required effects.
- 07.04 Control lens, focal length, aperture and exposure to obtain required effects.
- 07.05 Set up camera and recording equipment sequence.
- 07.06 Perform appropriate pre-production checks of equipment function.
- 07.07 Perform basic routine, preventative and repair maintenance on video equipment.
- 07.08 Define the various recording formats and media.
- 07.09 Define appropriate digital compression and signal (file) types.

08.0 Record, mix and edit audio resources -- The student will be able to:
- 08.01 Record location sound.
- 08.02 Record studio live sound.

10.0 Organize and edit video resources -- The student will be able to:
- 10.01 Log and organize video resources.
- 10.02 Input video resources into post-production equipment and workflow

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 5**
Course Number: **8772450**
Course Credit: **1**

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.03 Follow industry safety rules, regulations and policies.
- 01.04 Demonstrate proper handling of hazardous materials.
- 01.05 Demonstrate awareness of appropriate ergonomics.
- 01.06 Demonstrate proper care of equipment.
- 01.07 Demonstrate appropriate use of equipment in an efficient manner.

03.0 Generate a production schedule -- The student will be able to:
- 03.01 Define the segment or program type.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.01 Describe the nature and types of business organizations. SY 1.0
- 25.02 Explain the effect of key organizational systems on performance and quality.
- 25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.04 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 6**
Course Number: **8772460**
Course Credit: **1**

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
    05.03 Use lighting equipment according to industry safety standards.

08.0 Record, mix and edit audio resources -- The student will be able to:
    08.08 Perform sound edits and enhancements.

10.0 Organize and edit video resources -- The student will be able to:
    10.03 Log and organize video resources.
    10.04 Input video resources into post-production equipment and workflow.
    10.05 Operate editing hardware and software.
    10.06 Perform assemble edits for appropriate effect.
    10.07 Perform insert edits for appropriate effect.
    10.08 Maintain continuity and production values.
    10.09 Mix audio and video resources for final cut.
    10.10 Apply color correction to video footage.
    10.11 Demonstrate ability to edit in both SDTV and HDTV.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 7**
Course Number: **8772470**
Course Credit: **1**

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

03.0 Generate a production schedule -- The student will be able to:
- 03.01 Define the segment or program type.

10.0 Organize and edit video resources -- The student will be able to:
- 10.01 Log and organize video resources.
- 10.02 Input video resources into post-production equipment and workflow.
- 10.03 Operate editing hardware and software.
- 10.04 Perform assemble edits for appropriate effect.
- 10.05 Perform insert edits for appropriate effect.
- 10.06 Maintain continuity and production values.
- 10.07 Mix audio and video resources for final cut.
- 10.08 Apply color correction to video footage.
- 10.09 Transfer finished edit to other media for distribution or archiving.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.01 Describe the nature and types of business organizations. SY 1.0
- 25.02 Explain the effect of key organizational systems on performance and quality.
- 25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.04 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 8**
Course Number: **8772480**
Course Credit: **1**

11.0 Design and generate graphic elements -- The student will be able to:
- 11.01 Determine the graphic requirements for a production.
- 11.02 Operate graphic production software.
- 11.03 Produce broadcast graphic elements for titling, credits and graphic transitions.
- 11.04 Determine the special effects need for a production.
- 11.05 Set up and operate character generator equipment and software.
- 11.06 Generate appropriate special effects and animated elements for a production.
- 11.07 Demonstrate an understanding of graphic image types, file formats, and technical requirements for a production.
- 11.08 Use image editing (bit mapped) software.
- 11.09 Edit graphics into the program or segment.
- 11.10 Demonstrate an ability to use type, color, composition and graphic elements for a specific production effect.
- 11.11 Demonstrate an ability to use different aspect ratios as needed for SDTV and HDTV.

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.01 Describe the nature and types of business organizations. SY 1.0
- 25.02 Explain the effect of key organizational systems on performance and quality.
- 25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.04 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 9**
Course Number: **8772491**
Course Credit: **1**

01.0 Demonstrate safe and efficient work practices -- The student will be able to:
- 01.01 Follow industry safety rules, regulations and policies.
- 01.02 Demonstrate proper handling of hazardous materials.
- 01.03 Demonstrate awareness of appropriate ergonomics.
- 01.04 Demonstrate proper care of equipment.
- 01.05 Demonstrate appropriate use of equipment in an efficient manner.

02.0 Develop a project proposal and scrip t-- The student will be able to:
- 02.01 Identify a project goal.
- 02.02 Write a production script.
- 02.03 Develop a story-board from a script.

03.0 Generate a production schedule -- The student will be able to:
- 03.01 Define the segment or program type.
- 03.02 Identify production resources needed.
- 03.03 Establish viable production time frame targets.

05.0 Create appropriate lighting for location and/or set productions -- The student will be able to:
- 05.01 Use studio lighting master control equipment.

06.0 Operate a video camera -- The student will be able to:
- 08.05 Operate (CCU) Camera Control Unit.

09.0 Operate control room equipment -- The student will be able to:
- 09.01 Use vision control equipment.
- 09.02 Operate routing switcher for production and tape dubs.

10.0 Organize and edit video resources -- The student will be able to:
- 10.01 Log and organize video resources.
- 10.02 Input video resources into post-production equipment and workflow.

2011-2012

Florida Department of Education
Student Performance Standards

Course Title: **Digital Video Production 10**
Course Number: **8772492**
Course Credit: **1**

12.0 Plan, coordinate and manage a video or web class production -- The student will be able to:
- 12.01 Define the program/segment format and market.
- 12.02 Present a project proposal and script for approval.
- 12.03 Develop a production schedule.
- 12.04 Manage crew and staff during pre-planning and production.
- 12.05 Determine post-production requirements.
- 12.06 Coordinate post-production activities.
- 12.07 Direct final production values.
- 12.08 Archive and manage finished assets and originals.
- 12.09 Oversee broadcast/distribution to market.
- 12.10 Explain the techniques and procedures of web hosts, portals, television broadcast and cable networks, syndication and public broadcasters.

17.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 17.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 17.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 17.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 17.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 17.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 17.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 17.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 17.08 Research the benefits of ongoing professional development. ECD 9.0
- 17.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

25.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 25.01 Describe the nature and types of business organizations. SY 1.0
- 25.02 Explain the effect of key organizational systems on performance and quality.
- 25.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 25.04 Explain the impact of the global economy on business organizations

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0

26.03	Conduct and participate in meetings to accomplish work tasks.	LT 4.0
26.04	Employ mentoring skills to inspire and teach others.	LT 5.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Radio Broadcasting**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	PSAV
Program Number	I100114
CIP Number	0610.010401
Grade Level	30, 31
Standard Length	960 Hours
Teacher Certification	TV PRO TEC @7 G TEC ELEC ¶7 ¶G
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4011 27-1019 27-2012 27-3021
Facility Code	212 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for initial employment with occupational titles as radio and television announcer (SOC 27-3011), radio announcer (SOC 27-3011), broadcast technicians (SOC 27-4012).

The content should include, but not be limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, announcing and moderating programs, preparing copy, programming, and operation of audio broadcasting equipment to support broadcast managers in the production of materials and production and broadcasting of materials or programs in radio format.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Radio industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of six Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	RTT0502	Radio Board Operator	160 Hours	27-4011
B	RTT0504	Radio Production Assistant	160 Hours	27-1019
C	RTT0506	Radio News Assistant	160 Hours	27-1019
D	RTT0508	Radio Producer	160 Hours	27-2012
E	RTT0510	Radio News Analyst	160 Hours	27-3021
F	RTT0512	Radio Traffic Clerk	160 Hours	27-1019

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics N/A Language N/A and Reading N/A. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate knowledge of school and class procedures.
02.0 Demonstrate an understanding of general radio station studio equipment.
03.0 Demonstrate an ability to operate an audio control room.
04.0 Demonstrate knowledge of production writing.
05.0 Demonstrate basic analog production skills.
06.0 Demonstrate basic digital production skills.
07.0 Demonstrate advanced analog production skills.
08.0 Demonstrate advanced digital production skills.
09.0 Demonstrate appropriate broadcast speaking manner.
10.0 Demonstrate news writing skills.
11.0 Demonstrate news performance skills.
12.0 Demonstrate appropriate voice-over skills.
13.0 Demonstrate appropriate on-air skills.
14.0 Describe radio station operation.
15.0 Demonstrate mathematics knowledge and skills.
16.0 Demonstrate science knowledge and skills.

17.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
18.0 Demonstrate language arts knowledge and skills.
19.0 Solve problems using critical thinking skills, creativity and innovation.
20.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
21.0 Use information technology tools.
22.0 Describe the importance of professional ethics and legal responsibilities.
23.0 Demonstrate personal money-management concepts, procedures, and strategies.

24.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
25.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
26.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Radio Broadcasting**
PSAV Number: **I100114**

Course Number: RTT0502
Occupational Completion Point: A
Radio Board Operator -- 160 Hours – SOC Code 27-4011

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
- 01.01 Verbalize the rules and operation of school and class.
- 01.02 State the nature of the instruction.
- 01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

02.0 Demonstrate an understanding of general radio station studio equipment -- The student will be able to:
- 02.01 Demonstrate a working familiarity and understanding of the function of a control console.
- 02.02 Demonstrate knowledge of and the ability to operate turntables, tape recorders, cart recorders and players.

03.0 Demonstrate an ability to operate an audio control room -- The student will be able to:
- 03.01 Demonstrate an ability to control the audio portion of a deejay show and news program, combining all the elements of audio control in radio.
- 03.03 Understand the procedures of log keeping.
- 03.04 Demonstrate the ability to maintain control room logs.
- 03.05 Perform to high standards in the role of audio operator in varied format situations.

07.0 Demonstrate advanced analog production skills -- The student will be able to:
- 07.02 Demonstrate knowledge of and the ability to operate multi-track recorders and players.
- 07.03 Demonstrate an ability to utilize music and sound effects in the multi-track environment.

12.0 Demonstrate appropriate voice-over skills -- The student will be able to:
- 12.01 Demonstrate the ability to read aloud in a professional broadcast manner.

14.0 Describe radio station operation -- The student will be able to:
- 14.01 Explain the structure of the broadcast industry, the radio station, and the student’s role in the station’s operation.
- 14.03 Demonstrate a working knowledge of the rules and regulations pertaining to traffic control and standards of performance.
- 14.06 State the duties of the sales department.

15.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 15.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 15.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4

15.03 Construct charts/tables/graphs using functions and data. AF3.5

16.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
16.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
16.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

17.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
17.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
17.02 Locate, organize and reference written information from various sources. CM 3.0
17.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
17.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
17.05 Apply active listening skills to obtain and clarify information. CM 7.0
17.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
17.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

Course Number: RTT0504
Occupational Completion Point: B
Radio Production Assistant -- 160 Hours – SOC Code 27-1019

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
01.01 Verbalize the rules and operation of school and class.
01.02 State the nature of the instruction.
01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

02.0 Demonstrate an understanding of general radio station studio equipment -- The student will be able to:
02.01 Demonstrate a working familiarity and understanding of the function of a control console.
02.02 Demonstrate knowledge of and the ability to operate turntables, tape recorders, cart recorders and players.

03.0 Demonstrate an ability to operate an audio control room -- The student will be able to:
03.01 Demonstrate an ability to control the audio portion of a deejay show and news program, combining all the elements of audio control in radio.
03.02 Route outside organizations through the console.
03.03 Understand the procedures of log keeping.
03.05 Perform to high standards in the role of audio operator in varied format situations.

08.0 Demonstrate advanced digital production skills -- The student will be able to:
08.01 Demonstrate knowledge of and the ability to perform digital transfers of audio information between digital and analog production environments.
08.02 Demonstrate a working familiarity and understanding of the function and operation of multi-track digital audio workstations.

08.03 Demonstrate an ability to edit, cut, erase, and insert sound utilizing various digital production techniques in the multi-track digital environment.

12.0 Demonstrate appropriate voice-over skills -- The student will be able to:
12.01 Demonstrate the ability to read aloud in a professional broadcast manner.

14.0 Describe radio station operation -- The student will be able to:
14.01 Explain the structure of the broadcast industry, the radio station, and the student's role in the station's operation.
14.03 Demonstrate a working knowledge of the rules and regulations pertaining to traffic control and standards of performance.

18.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
18.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
18.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
18.03 Present information formally and informally for specific purposes and audiences. AF2.9

19.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
19.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
19.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
19.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
19.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

20.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
20.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
20.02 Explain emergency procedures to follow in response to workplace accidents.
20.03 Create a disaster and/or emergency response plan. SHE 2.0

Course Number: RTT0506
Occupational Completion Point: C
Radio News Assistant -- 160 Hours – SOC Code 27-1019

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
01.01 Verbalize the rules and operation of school and class.
01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

05.0 Demonstrate basic analog production skills -- The student will be able to:
01.02 Demonstrate a working familiarity and understanding of the function of a control console.
01.04 Demonstrate an ability to select and utilize music and sound effects in the production of recorded material.

06.0 Demonstrate basic digital production skills -- The student will be able to:
- 06.01 Demonstrate understanding of digital audio storage concepts and digital storage media.
- 06.02 Demonstrate knowledge of and the ability to operate Digital Audio Tape (DAT) decks, mini-disc recorders and players and other digital storage devices.

21.0 Use information technology tools--The students will be able to:
- 21.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 21.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 21.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 21.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

22.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
- 22.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 22.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 22.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 22.04 Interpret and explain written organizational policies and procedures. ELR 2.0

23.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
- 23.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 23.02 Describe the effect of money management on personal and career goals. FL 3.0
- 23.03 Develop a personal budget and financial goals. FL3.1
- 23.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 23.05 Maintain financial records. FL3.3
- 23.06 Read and reconcile financial statements. FL3.4
- 23.07 Research, compare and contrast investment opportunities.

Course Number: RTT0508
Occupational Completion Point: D
Radio Producer -- 160 Hours – SOC Code 27-2012

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
- 01.01 Verbalize the rules and operation of school and class.
- 01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

03.0 Demonstrate an ability to operate an audio control room -- The student will be able to:
- 03.01 Demonstrate an ability to control the audio portion of a deejay show and news program, combining all the elements of audio control in radio.
- 03.03 Understand the procedures of log keeping.

05.0 Demonstrate advanced analog production skills -- The student will be able to:
- 05.02 Demonstrate knowledge of and the ability to operate multi-track recorders and players.
- 05.03 Demonstrate an ability to utilize music and sound effects in the multi-track environment.

08.0 Demonstrate advanced digital production skills -- The student will be able to:
- 08.01 Demonstrate knowledge of and the ability to perform digital transfers of audio information between digital and analog production environments.
- 08.02 Demonstrate a working familiarity and understanding of the function and operation of multi-track digital audio workstations.
- 08.03 Demonstrate an ability to edit, cut, erase, and insert sound utilizing various digital production techniques in the multi-track digital environment.

09.0 Demonstrate appropriate broadcast speaking manner -- The student will be able to:
- 09.03 Articulate and pronounce words according to accepted standards.

12.0 Demonstrate appropriate voice-over skills -- The student will be able to:
- 12.01 Demonstrate the ability to read aloud in a professional broadcast manner.
- 12.02 Modify their reading speed as required to properly complete their assignment in the available time.
- 12.03 Demonstrate the ability to receive and properly act upon direction given by the commercial producer.

14.0 Describe radio station operation -- The student will be able to:
- 14.01 Explain the structure of the broadcast industry, the radio station, and the student's role in the station's operation.
- 14.03 Demonstrate a working knowledge of the rules and regulations pertaining to traffic control and standards of performance.
- 14.06 State the duties and qualifications of the music director.

24.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
- 24.01 Describe the nature and types of business organizations. SY 1.0
- 24.02 Explain the effect of key organizational systems on performance and quality.
- 24.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 24.04 Explain the impact of the global economy on business organizations.

25.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
- 25.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 25.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 25.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 25.04 Employ mentoring skills to inspire and teach others. LT 5.0

26.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 26.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0

26.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
26.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
26.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
26.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
26.06 Identify and exhibit traits for retaining employment. ECD 7.0
26.07 Identify opportunities and research requirements for career advancement. ECD 8.0
26.08 Research the benefits of ongoing professional development. ECD 9.0
26.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: RTT0510
Occupational Completion Point: E
Radio News Analyst -- 160 Hours – SOC Code 27-3021

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
01.01 Verbalize the rules and operation of school and class.
01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

02.0 Demonstrate an understanding of general radio station studio equipment -- The student will be able to:
02.01 Demonstrate a working familiarity and understanding of the function of a control console.
02.02 Demonstrate knowledge of and the ability to operate turntables, tape recorders, cart recorders and players.

04.0 Demonstrate a knowledge of production writing -- The student will be able to:
04.01 Explain the job of a copywriter and outline the elements of good copy and copy writing.
04.02 Demonstrate ability to write commercial copy in its various forms.

05.0 Demonstrate basic analog production skills -- The student will be able to:
05.01 Demonstrate a working familiarity and understanding of the function of a control console.
05.06 Perform to high standards in the role of production person in varied format situations.

06.0 Demonstrate appropriate voice-over skills -- The student will be able to:
06.01 Demonstrate the ability to read aloud in a professional broadcast manner.
06.05 Perform the various assignments in a professional manner according to industry standards.

12.0 Demonstrate appropriate on-air skills -- The student will be able to:
12.01 State the characteristics of various microphones and demonstrate the ability to use them.
12.05 List the elements and procedures of log keeping.

14.0 Describe radio station operation -- The student will be able to:
14.01 Explain the structure of the broadcast industry, the radio station, and the student's role in the station's operation.

14.03 Demonstrate a working knowledge of the rules and regulations pertaining to traffic control and standards of performance.
14.04 State the duties of the promotions department.

Course Number: RTT0512
Occupational Completion Point: F
Radio Traffic Clerk -- 160 Hours – SOC Code 27-1019

01.0 Demonstrate knowledge of school and class procedures -- The student will be able to:
01.01 Verbalize the rules and operation of school and class.
01.03 Identify what will be learned in relation to stated goals and job opportunities that exist.

07.0 Demonstrate advanced analog production skills -- The student will be able to:
07.01 Demonstrate a working familiarity of and understanding of multi-track production.
07.05 Perform to high standards in the role of multi-track production person in varied format situations.

10.0 Demonstrate news writing skills -- The student will be able to:
10.02 Demonstrate ability to mark, edit, and present news in an acceptable manner.
10.05 Demonstrate ability to write news stories in broadcast style.

12.0 Demonstrate appropriate voice-over skills -- The student will be able to:
12.01 Demonstrate the ability to read aloud in a professional broadcast manner.
12.05 Perform the various assignments in a professional manner according to industry standards.

14.0 Describe radio station operation -- The student will be able to:
14.01 Explain the structure of the broadcast industry, the radio station, and the student's role in the station's operation.
14.03 Demonstrate a working knowledge of the rules and regulations pertaining to traffic control and standards of performance.
14.06 State the duties of the sales department.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Communications Electronics**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	PSAV
Program Number	I470103
CIP Number	0647.010300
Grade Level	30, 31
Standard Length	2840 Hours
Teacher Certification	TEC ELEC @7 G ELECTRONIC @7 G
CTSO	SkillsUSA
SOC Codes (all applicable)	51-2022 49-2094 49-2021 27-4013
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 10 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as communications technicians.

The course content will include the following: operation, maintenance and repair of am and fm radios, single and double side band radios, data communication equipment, mobile radio/telephone systems, fiber optic systems, microwave equipment and satellite systems. The course content should also include training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Communication Electronics industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Algebra is recommended as a prerequisite for entry into this program.

Program Structure

This program is a planned sequence of instruction consisting of one program, eight Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	EEV0010	Electronics Assembler	250 Hours	51-2022
B	EEV0100	Electronics Tester	400 Hours	49-2094
C	EEV0500	Electronics Equipment Repairer	375 Hours	49-2094
D	EEV0616	Electronics Technician	375 Hours	49-2094
E	EEV0311	Electronics Radio Technician	360 Hours	49-2021
F	EEV0312	Communications Technician	360 Hours	49-2021
G	EEV0401	Electronics Specialist	360 Hours	49-2021
H	EEV0316	Data Communication Technician	360 Hours	27-4013

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical

Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 10 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate proficiency in soldering and basic laboratory practices.
02.0 Demonstrate proficiency in DC circuits.
03.0 Explain the importance of employability and entrepreneurship skills.
04.0 Demonstrate proficiency in basic computer usage.
05.0 Demonstrate proficiency in advanced DC circuits.
06.0 Demonstrate proficiency in AC circuits.
07.0 Demonstrate proficiency in solid state devices.
08.0 Demonstrate language arts knowledge and skills.
09.0 Solve problems using critical thinking skills, creativity and innovation.
10.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance
11.0 Demonstrate proficiency in digital circuits.
12.0 Demonstrate proficiency in fundamental micro-processors.
13.0 Use information technology tools.
14.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
15.0 Demonstrate personal money-management concepts, procedures, and strategies

16.0 Demonstrate proficiency in analog circuits.
17.0 Demonstrate skills in technical recording.
18.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas
19.0 Demonstrate appropriate understanding of basic math skills.
20.0 Demonstrate an understanding of basic science skills.
21.0 Demonstrate mathematics knowledge and skills:
22.0 Demonstrate science knowledge and skills
23.0 Demonstrate proficiency in Amplitude Modulated radio transmitter and receiver systems.
24.0 Demonstrate proficiency in Double Side Band and Single Side Band radio systems.
25.0 Demonstrate proficiency in Frequency Modulated radio transmitter and receiver systems.
26.0 Demonstrate proficiency in high frequency AM and FM two-way radio systems.
27.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
28.0 Describe the importance of professional ethics and legal responsibilities.
29.0 Demonstrate mathematics knowledge and skills.
30.0 Demonstrate science knowledge and skills.
31.0 Demonstrate proficiency in microwave systems.
32.0 Demonstrate proficiency in satellite systems.
33.0 Demonstrate proficiency in video systems.
34.0 Demonstrate proficiency in commercial audio systems.
35.0 Demonstrate proficiency in data communications.
36.0 Demonstrate proficiency in Fiber Optic Communications Systems.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Communication Electronics**
PSAV Number: **I470103**

Course Number: EEV0010
Occupational Completion Point: A
Electronic Assembler – 250 Hours – SOC Code 51-2022

01.0 Demonstrate proficiency in soldering and basic laboratory practices -- the student will be able to:
- 01.01 Apply proper Occupational Safety Health Administration (OSHA) safety standards.
- 01.02 Make electrical connections.
- 01.03 Identify and use hand tools properly.
- 01.04 Identify and use power tools properly.
- 01.05 Demonstrate acceptable soldering techniques.
- 01.06 Demonstrate acceptable desoldering techniques.
- 01.07 Demonstrate Electrostatic Discharge (ESD) safety procedures.
- 01.08 Describe the construction of Printed Circuit Boards (PCB's).
- 01.09 Explain the theoretical concepts of soldering.
- 01.10 Demonstrate rework and repair techniques.

02.0 Demonstrate proficiency in DC circuits -- the student will be able to:
- 02.01 Demonstrate proficiency in basic DC circuits.
- 02.02 Solve problems in electronic units utilizing metric prefixes.
- 02.03 Identify sources of electricity.
- 02.04 Define voltage, current, resistance, power and energy.
- 02.05 Apply ohm's law and power formulas.
- 02.06 Read and interpret color codes and symbols to identify electrical components and values.
- 02.07 Measure properties of a circuit using Volt-Ohm Meter (VOM) and Digital Volt-Ohm Meter (DVM) and oscilloscopes.
- 02.08 Compute conductance and compute and measure resistance of conductors and insulators.
- 02.09 Apply Ohm's law to series circuits.
- 02.10 Construct and verify operation of series circuits.
- 02.11 Analyze and troubleshoot series circuits.
- 02.12 Apply Ohm's law to parallel circuits.
- 02.13 Construct and verify the operation of parallel circuits.
- 02.14 Analyze and troubleshoot parallel circuits.

03.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
- 03.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 03.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 03.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 03.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 03.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0

03.06 Identify and exhibit traits for retaining employment. ECD 7.0
03.07 Identify opportunities and research requirements for career advancement. ECD 8.0
03.08 Research the benefits of ongoing professional development. ECD 9.0
03.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: EEV0100
Occupational Completion Point: B
Electronics Tester – 400 Hours – SOC Code 49-2094

04.0 Demonstrate proficiency in basic computer usage -- the student will be able to:
04.01 Demonstrate the use of a micro-computer operating system.
04.02 Demonstrate the use of a high level computer language.
04.03 Demonstrate the use of micro-computer application programs (i.e., word processing, data base and spreadsheet).

05.0 Demonstrate proficiency in advanced DC circuit -- the student will be able to:
05.01 Solve algebraic problems to include exponentials to DC.
05.02 Relate electricity to the nature of matter.
05.03 Apply Ohm’s law to series-parallel and parallel-series circuits.
05.04 Construct and verify the operation of series-parallel and parallel-series and bridge circuits.
05.05 Troubleshoot series-parallel and parallel-series and bridge circuits.
05.06 Identify and define voltage divider circuits (loaded and unloaded).
05.07 Construct and verify the operation of voltage divider circuits (loaded and unloaded).
05.08 Analyze and troubleshoot voltage divider circuits (loaded and unloaded).
05.09 Apply maximum power transfer theorem.
05.10 Construct and verify the operation of DC circuits that demonstrate the maximum power transfer theory.
05.11 Describe magnetic properties of circuits and devices.
05.12 Determine the physical and electrical characteristics of capacitors and inductors.
05.13 Define Resistor-Capacitor (R-C) and Resistor-Indicator (R-L) time constants and classify the output of differentiators and integrators.
05.14 Set up and operate power supplies for DC circuits.

06.0 Demonstrate proficiency in AC circuits -- the student will be able to:
06.01 Solve basic trigonometric problem as applicable to electronics.
06.02 Define the characteristics of AC capacitive circuits.
06.03 Construct and verify the operation of AC capacitive circuits.
06.04 Analyze and troubleshoot AC capacitive circuits.
06.05 Define the characteristics of AC inductive circuits.
06.06 Construct and verify the operation of AC inductive circuits.
06.07 Analyze and troubleshoot AC inductive circuits.
06.08 Define and apply the principles of transformers to AC circuits.
06.09 Construct and verify the operation of AC circuits utilizing transformers.
06.10 Analyze and troubleshoot AC circuits utilizing transformers.
06.11 Construct and verify the operation of differentiators and integrators to determine R-C and R-L time constraints.
06.12 Analyze and troubleshoot differentiator and integrator circuits.

06.13 Define the characteristics of resistive, inductive, and capacitive RLC circuits (series, parallel and complex).
06.14 Construct and verify the operation of series and parallel resonant circuits.
06.15 Define the characteristics of series and parallel resonant circuits.
06.16 Construct and verify the operation of series and parallel resonant circuits.
06.17 Analyze and troubleshoot R-C, R-L, and RLC circuits.
06.18 Define the characteristics of frequently selective filter circuits.
06.19 Construct and verify the operation of frequently selective filter circuits.
06.20 Analyze and troubleshoot frequently selective filter circuits.
06.21 Define the characteristics of polyphase circuits.
06.22 Define basic motor theory and operation.
06.23 Define basic generator theory and operation.
06.24 Set up and operate power supplies for AC circuits.
06.25 Analyze and measure power in AC circuits.
06.26 Set up and operate capacitor and inductor analyze for AC circuits.

07.0 Demonstrate proficiency in solid state devices -- the student will be able to:
07.01 Identify and define properties of semiconductor materials.
07.02 Identify and define operating characteristics and applications of junction diodes.
07.03 Identify and define operating characteristics and applications of special diodes.
07.04 Construct diode circuits.
07.05 Analyze and troubleshoot diode circuits.
07.06 Identify and define operating characteristics and applications of bipolar transistors.
07.07 Identify and define operating characteristics and applications of field effect transistors.
07.08 Identify and define operating characteristics and applications of single-stage amplifiers.
07.09 Construct single-stage amplifiers.
07.10 Analyze and troubleshoot single-stage amplifiers.
07.11 Construct thyristor circuitry.
07.12 Analyze and troubleshoot thyristor circuitry.
07.13 Set up and operate VOM for solid-state devices.
07.14 Set up and operate DVM for solid-state devices.
07.15 Set up and operate power supplies for solid-state devices.
07.16 Set up and operate oscilloscopes for solid-state devices.
07.17 Set up and operate function generators for solid-state devices.
07.18 Set up and operate capacitor and capacitor and inductor analyzers for solid-state devices.
07.19 Set up and operate curve tracers.
07.20 Set up and operate transistor testers.

08.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
08.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
08.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
08.03 Present information formally and informally for specific purposes and audiences. AF2.9

09.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:

09.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
09.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
09.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
09.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

10.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
10.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
10.02 Explain emergency procedures to follow in response to workplace accidents.
10.03 Create a disaster and/or emergency response plan.

Course Number: EEV0500
Occupational Completion Point: C
Electronic Equipment Repairer – 375 Hours – SOC Code 49-2094

11.0 Demonstrate proficiency in digital circuits -- the student will be able to:
11.01 Define and apply numbering systems to codes and arithmetic operations.
11.02 Analyze and minimize logic circuits using Boolean operations.
11.03 Set up and operate logic probes for digital circuits.
11.04 Set up and operate power supplies for digital circuits and solve power distribution and noise problems.
11.05 Set up and operate pulsers for digital circuits.
11.06 Set up and operate oscilloscopes for digital circuits.
11.07 Set up and operate logic analyzers for digital circuits.
11.08 Set up and operate pulse generators for digital circuits.
11.09 Identify types of logic gates and their truth tables.
11.10 Construct combinational logic circuits using integrated circuits.
11.11 Troubleshoot logic circuits.
11.12 Analyze types of flip-flops and their truth tables.
11.13 Construct flip-flops using integrated circuits.
11.14 Troubleshoot flip-flops.
11.15 Identify, define and measure characteristics of Integrated Circuit (IC) logic families.
11.16 Identify types of registers and counters.
11.17 Construct registers and counters using flip-flops and logic gates.
11.18 Troubleshoot registers and counters.
11.19 Analyze clock and timing circuits.
11.20 Construct clock and timing circuits.
11.21 Troubleshoot clock and timing circuits.
11.22 Identify types of arithmetic-logic circuits.
11.23 Construct arithmetic-logic circuits.
11.24 Troubleshoot arithmetic-logic circuits.
11.25 Identify types of encoding and decoding devices.
11.26 Construct encoders and decoders.
11.27 Troubleshoot encoders and decoders.
11.28 Identify types of multiplexer and demultiplexer circuits.
11.29 Construct multiplexer and demultiplexer circuits using integrated circuits.

11.30 Troubleshoot multiplexer and demultiplexer circuits.
11.31 Identify types of memory circuits.
11.32 Relate the uses of digital-to-analog and analog-to-digital conversions.
11.33 Construct digital-to-analog and analog-to-digital circuits.
11.34 Troubleshoot digital-to-analog and analog-to-digital circuits.
11.35 Identify types of digital displays.
11.36 Construct digital display circuits.
11.37 Troubleshoot digital display circuits.

12.0 Demonstrate proficiency in fundamental micro processors -- the student will be able to:
12.01 Identify Central Processing Unit (CPU) building blocks and their uses (architecture).
12.02 Analyze bus concepts.
12.03 Analyze various memory schemes.
12.04 Use memory devices in circuits.
12.05 Troubleshoot memory device circuits.
12.06 Set up and operate oscilloscopes for microprocessor systems.
12.07 Set up and operate logic-data analyzers to troubleshoot microprocessor systems.
12.08 Identify types of input and output devices and peripherals.
12.09 Interface input and output ports to peripherals.
12.10 Analyze and troubleshoot input and output ports.
12.11 Write a macro processor program in assembly language.
12.12 Write a macro processor program in machine language.
12.13 Execute microprocessor instruction sets.

13.0 Use information technology tools--The students will be able to:
13.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
13.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
13.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
13.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

14.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
14.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
14.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
14.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
14.04 Employ mentoring skills to inspire and teach others. LT 5.0

15.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
15.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
15.02 Describe the effect of money management on personal and career goals. FL 3.0
15.03 Develop a personal budget and financial goals. FL3.1
15.04 Complete financial instruments for making deposits and withdrawals. FL3.2
15.05 Maintain financial records. FL3.3

15.06 Read and reconcile financial statements. FL3.4
15.07 Research, compare and contrast investment opportunities.

Course Number: EEV0616
Occupational Completion Point: D
Electronics Technician – 375 Hours – SOC Code 49-2094

16.0 Demonstrate proficiency in analog circuits -- the student will be able to:
16.01 Identify and define operational characteristics and applications of multistage amplifiers.
16.02 Construct multistage amplifiers.
16.03 Analyze and troubleshoot multistage amplifiers.
16.04 Identify and define operating characteristics and applications of linear integrated circuits.
16.05 Identify and define operating characteristics and applications of basic power supplies and filters.
16.06 Construct basic power supplies and filters.
16.07 Identify and define operating characteristics and applications of differential and operational amplifiers.
16.08 Construct differential and operational amplifier circuits.
16.09 Analyze and troubleshoot differential and operational amplifier circuits.
16.10 Identify and define operating characteristics of audio power amplifiers.
16.11 Construct audio power amplifiers.
16.12 Analyze and troubleshoot audio power amplifiers.
16.13 Identify and define operating characteristics and applications of power supply regulator circuits.
16.14 Construct power supply regulator circuits.
16.15 Analyze and troubleshoot power supply regulator circuits.
16.16 Identify and define operating characteristics and applications of active filters.
16.17 Construct active filter circuits.
16.18 Analyze and troubleshoot active filter circuits.
16.19 Identify and define operating characteristics and applications of sinusoidal and Nonsinusoidal Oscillator Circuits.
16.20 Construct oscillator circuits.
16.21 Analyze and troubleshoot oscillator circuits.
16.22 Identify and define operating characteristics and applications of cathode ray tubes.
16.23 Identify and define operating characteristics and applications of OPTO-electronic devices.
16.24 Set up and operate measuring instruments for analog circuits.

17.0 Demonstrate skills in technical recording -- the student will be able to:
17.01 Draw and interpret electronic schematics.
17.02 Record data and design curves and graphs.
17.03 Write reports and make oral presentations.
17.04 Maintain test logs.
17.05 Make equipment failure reports.
17.06 Specify and requisition simple electronic components.
17.07 Compose technical letters and memoranda.
17.08 Write formal reports of laboratory experiences.
17.09 Draft preventive maintenance and calibration procedures.

18.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

- *18.01* Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 18.02 Locate, organize and reference written information from various sources. CM 3.0
- 18.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 18.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 18.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 18.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 18.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

19.0 Demonstrate appropriate understanding of basic math skills -- the student will be able to:

- 19.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares and cylinders.
- 19.02 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet, and inches.
- 19.03 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 19.04 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six (6) items.
- 19.05 Demonstrate an understanding of federal, state, and local taxes and their computation.

20.0 Demonstrate an understanding of basic science skills -- the student will be able to:

- 20.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
- 20.02 Draw conclusions or make interference's from data.
- 20.03 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
- 20.04 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

21.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0

- 21.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 21.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 21.03 Construct charts/tables/graphs using functions and data. AF3.5

22.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0

- 22.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 22.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

Course Number: EEV0311
Occupational Completion Point: E
Electronic Radio Technician – 360 Hours – SOC Code 49-2021

23.0 Demonstrate proficiency in Amplitude Modulated radio transmitter and receiver systems -- the student will be able to:

23.01 Describe the operation of Amplitude Modulated (AM) radio systems.
23.02 Identify the stages of AM radio transmitters and receivers.
23.03 Define principles of AM modulation.
23.04 Analyze and troubleshoot AM transmitter and receiver circuits to include mixers, if amplifiers, local oscillators, modulators, demodulators and microphones.
23.05 Align Intermediate Frequency (IF) circuits using the AM signal generator or sweep generator and oscilloscope.
23.06 Measure the IF section bandwidth using a sweep generator and an oscilloscope or signal generator and a spectrum analyzer.
23.07 Measure input voltage sensitivity to the receiver using a signal to noise ratio meter or spectrum analyzer.
23.08 Determine signal to noise ratio.
23.09 Conduct operating systems checks of AM transmitter and receiver circuits and make minor adjustments.
23.10 Set up and adjust AM antenna systems using a power meter and Standing Wave Ratio (SWR) meter.
23.11 Analyze AM radio circuits using spectrum analyzers, noise analyzers impedance bridges, sweep generators, dummy loads and phase meters.
23.12 Measure AM radio signals using power meters, field strength meters and distortion meters.
23.13 Analyze, troubleshoot and adjust AM heterodyning, frequency synthesis, phased locked looped, signal filtering and automatic control circuits.
23.14 Analyze, troubleshoot and adjust Radio Frequency (RF) power amplifier circuits for AM radio transmitters.
23.15 Analyze, troubleshoot and adjust AM stereo transmitter and receiver circuits.

24.0 Demonstrate proficiency in Double Side Band and Single Side Band radio systems -- the student will be able to:

24.01 Describe the operation of Double Side Band Suppressed Carrier (DSSC) radio systems.
24.02 Identify the stages of DSSC radio transmitters and receivers.
24.03 Analyze and troubleshoot DSSC transmitter and receiver circuits.
24.04 Conduct operating systems check of DSSC circuits and make minor adjustments.
24.05 Describe the operation of Single Side Band (SSB) radio systems.
24.06 Identify the stages of SSB radio transmitters and receivers.
24.07 Analyze and troubleshoot SSB transmitter and receiver circuits.
24.08 Conduct operating systems check of SSB circuits and make minor adjustments.
24.09 Set up and adjust SSB and DSSC antenna systems using power meters and SWR meters.
24.10 Analyze or measure SSB and DSSC radio circuits using spectrum analyzers, noise analyzers, impedance bridges, sweep generators, dummy loads and phase meters.
24.11 Analyze and measure SSB and DSSC radio signals using power meters, field strength meters and distortion meters.
24.12 Analyze, troubleshoot and adjust SSB and DSSC heterodyning, frequency synthesis, phased locked looped, signal filtering and automatic control circuits.
24.13 Analyze, troubleshoot and adjust RF power amplifier circuits for SSB and DSSC radio transmitters.

25.0 Demonstrate proficiency in Frequency Modulated radio transmitter and receiver systems -- the student will be able to:

25.01 Describe the operation of Frequency Modulated (FM) radio systems.
25.02 Identify the stages of FM radio transmitters and receivers.
25.03 Define principles of FM modulation.
25.04 Analyze and troubleshoot fm transmitter and receiver circuits.
25.05 Align if circuits using and fm signal generator and sweep generator.
25.06 Measure if section bandwidth using an oscilloscope or spectrum analyzer.
25.07 Measure receiver input voltage sensitivity to receiver antenna input using a signal to noise ratio meter or spectrum analyzer.
25.08 Conduct operating systems check of FM transmitter and receiver circuits and make minor adjustments.
25.09 Analyze and troubleshoot FM stereo transmitter, receiver and digital tuning circuits.
25.10 Conduct operating systems check of broad band FM stereo transmitter and receiver circuits and make minor adjustments.
25.11 Analyze, troubleshoot and adjust the standard FM right and left channel subcarrier and the Subsidiary Carrier Authority (SCA) signal.
25.12 Analyze, troubleshoot and adjust phase modulation circuits.
25.13 Analyze, troubleshoot and adjust FM pulse modulation circuits.
25.14 Analyze, troubleshoot and adjust FM multiplex circuits.
25.15 Analyze, troubleshoot and adjust wide band and narrow band FM transceiver circuits.
25.16 Set up and adjust FM antenna systems using a power meter and SWR meter.
25.17 Analyze or measure fm radio circuits using spectrum analyzers, noise analyzers, impedance bridges, sweep generators, dummy loads and phase meters.
25.18 Analyze and measure FM radio signals using power meters, field strength meters and distortion meters.
25.19 Analyze, troubleshoot and adjust FM heterodyning, frequency synthesis, phased locked looped, signal filtering and automatic control circuits.
25.20 Analyze, troubleshoot and adjust RF power amplifier circuits for FM radio transmitters.

26.0 Demonstrate proficiency in high frequency AM and FM two-way radio systems -- the student will be able to:

26.01 Apply Federal Communications Commission (FCC) rules and regulations to communication requirements.
26.02 Describe the operation of High Frequency (HF), Very High Frequency (VHF) and Ultra High Frequency (UHF) AM and FM two-way radio systems.
26.03 Identify the stages of HF, VHF and UHF AM and FM two-way radio systems.
26.04 Analyze and troubleshoot HF, VHF and UHF AM and FM two-way radio transmitter and receiver circuits.
26.05 Set up and adjust HF, VHF and UHF AM and FM antenna systems.
26.06 Analyze and troubleshoot the DC remote control on repeater and remote base auxiliary equipment.
26.07 Analyze and troubleshoot the tone remote control on repeater and remote base auxiliary equipment.
26.08 Analyze and troubleshoot the local remote control on repeater and remote base auxiliary equipment.
26.09 Analyze and troubleshoot the RF remote control on repeater and remote base auxiliary equipment.

26.10 Explain paging and mobile phone communications theory and language.
26.11 Analyze and troubleshoot paging and mobile phone two-tone and five-tone paging and digital formats.
26.12 Analyze and troubleshoot paging and mobile phone signaling and operation.
26.13 Service and repair cellular mobile phones and pagers.

27.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
27.01 Describe the nature and types of business organizations. SY 1.0
27.02 Explain the effect of key organizational systems on performance and quality.
27.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
27.04 Explain the impact of the global economy on business organizations. HE 2.0

28.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
28.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
28.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
28.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
28.04 Interpret and explain written organizational policies and procedures. ELR 2.0

29.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
29.01 Demonstrate knowledge of arithmetic operations. AF3.2
29.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
29.03 Construct charts/tables/graphs using functions and data. AF3.5

30.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
30.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
30.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

Course Number: EEV0312
Occupational Completion Point: F
Communication Technician – 360 Hours – SOC Code 49-2021

31.0 Demonstrate proficiency in microwave systems -- the student will be able to:
31.01 Describe the operation of microwave transmission systems.
31.02 Identify the components of microwave transmission systems.
31.03 Analyze and troubleshoot microwave transmitter and receiver circuits.
31.04 Conduct operating systems checks of microwave transmitters and receivers and make minor adjustments.
31.05 Identify local codes and deed restrictions applicable to site surveys for microwave installations.
31.06 Set up and adjust microwave antenna systems.
31.07 Measure microwave system power and SWR.
31.08 Describe procedures to interface a microwave system to a public switched telephone network.

32.0 Demonstrate proficiency in satellite systems -- the student will be able to:
- 32.01 Describe the operation of satellite systems.
- 32.02 Identify the components of satellite systems.
- 32.03 Describe the process of time division multiplexing and frequency division multiplexing used with satellite transponders.
- 32.04 Analyze, troubleshoot and adjust satellite transponder circuits using a high frequency sweep generator and frequency counter.
- 32.05 Analyze and troubleshoot video and audio demodulators in satellite receivers.
- 32.06 Determine location data for satellites.
- 32.07 Identify local codes and deed restrictions applicable to site surveys for satellite systems.
- 32.08 Set up and adjust satellite antenna systems.
- 32.09 Analyze and troubleshoot a satellite receiver low noise amplifier and down converter.
- 32.10 Describe procedures to interface satellite systems with two-way up link and down link communications equipment.

Course Number: EEV0401
Occupational Completion Point: G
Electronics Specialist – 360 Hours – SOC Code 49-2021

33.0 Demonstrate proficiency in video systems -- the student will be able to:
- 33.01 Analyze and adjust the composition of video signals.
- 33.02 Define the principles of video signal generation.
- 33.03 Describe the principles of video multiplex circuits.
- 33.04 Analyze and adjust black and white and color display circuits.
- 33.05 Analyze, troubleshoot and adjust the color component of a signal.
- 33.06 Analyze, troubleshoot and adjust the luminance component of a signal.
- 33.07 Analyze and troubleshoot the synchronous, horizontal and vertical components of a signal.
- 33.08 Measure the signal-to-noise ratio for video signals.
- 33.09 Analyze video circuits using a spectrum analyzer.
- 33.10 Interconnect video system components using coaxial cables.
- 33.11 Analyze, troubleshoot and adjust video and RF distribution systems.
- 33.12 Analyze and adjust a modulator for a video distribution system.

34.0 Demonstrate proficiency in commercial audio systems -- the student will be able to:
- 34.01 Describe the functions of communication system audio components.
- 34.02 Analyze, troubleshoot and adjust audio amplifier components and speaker system components.
- 34.03 Define the application of microphone and speaker systems.
- 34.04 Describe the application of wireless microphones with frequency diversity and the use of equalizers and time delay systems.
- 34.05 Determine the impedance and power requirements of microphones and speakers.

Course Number: EEV0316
Occupational Completion Point: H
Data Communications Technician – 360 Hours – SOC Code 27-4013

35.0 Demonstrate proficiency in data communications -- the student will be able to:
- 35.01 Describe the operation of data communications systems.
- 35.02 Identify the components of data communications systems.
- 35.03 Analyze and define data communication codes, formats and protocols.
- 35.04 Identify serial and parallel ports and explain their use.
- 35.05 Describe the principles of synchronous and asynchronous data transmission systems.
- 35.06 Identify types of modems and modulation techniques.
- 35.07 Set up and operate modems.
- 35.08 Isolate problems of modem operation or common carrier lines.
- 35.09 Analyze and troubleshoot modems.
- 35.10 Identify and describe types of carrier systems.
- 35.11 Interconnect systems using the RS-232 interface standard.
- 35.12 Describe the operation and bus architecture of local area networks.
- 35.13 Analyze and troubleshoot base band and broad band local area networks.
- 35.14 Identify telephone terms and procedures for interfacing wire lines with data networks.
- 35.15 Analyze and troubleshoot the data communications systems associated with automatic teller machines and credit card readers.
- 35.16 Describe the operation of lasers used with data transmission.

36.0 Demonstrate proficiency in fiber optic communications systems -- the student will be able to:
- 36.01 Identify and describe the basic characteristics of optics such as reflection, refraction and total reflection.
- 36.02 Identify the characteristics and components of fiber optic cables.
- 36.03 Describe the modes of propagation used in fiber optic cables.
- 36.04 Identify bandwidth and attenuation limitations for fiber optic systems.
- 36.05 Describe the technique of wavelength multiplexing in fiber optic cables.
- 36.06 Identify and describe the characteristics of various types of light sources and light emitting diodes used for fiber optic systems.
- 36.07 Identify and describe the components of fiber optic transmission systems.
- 36.08 Assemble a simple fiber optic data transmission system.
- 36.09 Analyze and troubleshoot the components of fiber optic data transmission systems.
- 36.10 Describe the procedures used to interface fiber optic systems with microwave and satellite data transmission systems.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title:	**Wireless Telecommunications**
Program Type:	**Career Preparatory**
Career Cluster:	**Arts, A/V Technology and Communication**

	PSAV
Program Number	I470305
CIP Number	0647010302
Grade Level	30, 31
Standard Length	1500 Hours
Teacher Certification	TELCOM 7G
CTSO	SkillsUSA
SOC Codes (all applicable)	15-1071
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 10 Language: 10 Reading: 10

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as Computer and Wireless Technicians.

The course content includes, but is not limited to the following: operation and maintenance of Personal computers, computing networks, printers, communications equipment and wireless systems.

The course content should also include training in communication, leadership, human relations, employability skills, and safe, efficient work practices.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Computer and Wireless industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of one program, six Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	CTS0004	Computer Support Technician	150 Hours	15-1071
B	EEV0505	Computer Support Specialist	300 Hours	15-1071
C	CTS0006	Network Support Technician	150 Hours	15-1071
D	CTS0007	Network Specialist	300 Hours	15-1071
E	CTS0008	Network Administrator	300 Hours	15-1071
F	CTS0009	Wireless Telecommunications Administrator	300 Hours	15-1071

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 10 Language 10 and Reading 10. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

The PSAV component of this program (I470305) has a statewide articulation agreement approved by the Articulation Coordinating Committee:

Computer Engineering Technology (0647.010302) – 15 Credits

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate proficiency in computer and software fundamentals.
02.0 Demonstrate proficiency in customer relations.
03.0 Demonstrate mathematics knowledge and skills.
04.0 Demonstrate science knowledge and skills.
05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
06.0 Demonstrate proficiency in installation, configuration and upgrading.
07.0 Demonstrate proficiency in diagnosing and troubleshooting.
08.0 Demonstrate proficiency in preventative maintenance.
09.0 Demonstrate an understanding of Motherboards.
10.0 Demonstrate an understanding of processors and memory.
11.0 Demonstrate proficiency in the understanding of printers.
12.0 Demonstrate proficiency in basic networking.
13.0 Demonstrate proficiency in operating systems and protocols.
14.0 Demonstrate proficiency in fault tolerance.
15.0 Demonstrate proficiency in the OSI layer model.

16.0 Demonstrate proficiency in networking media and topologies.
17.0 Demonstrate proficiency in network elements
18.0 Demonstrate proficiency in installation, configuration, and troubleshooting scenarios.
19.0 Demonstrate language arts knowledge and skills.
20.0 Solve problems using critical thinking skills, creativity and innovation.
21.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
22.0 Demonstrate proficiency in network components.
23.0 Demonstrate proficiency in the OSI model data link layer.
24.0 Demonstrate proficiency in the OSI model network layer.
25.0 Demonstrate proficiency in the OSI model transport layer.
26.0 Demonstrate proficiency in TCP/IP fundamentals
27.0 Demonstrate proficiency in understanding of TCP/IP addressing.
28.0 Demonstrate proficiency in understanding of TCP/IP configuration.
29.0 Demonstrate proficiency in understanding of TCP/IP utilities.
30.0 Demonstrate proficiency in understanding of remote connectivity.
31.0 Demonstrate proficiency in understanding of dial-up networking.
32.0 Demonstrate proficiency in understanding of network security.
33.0 Demonstrate proficiency in understanding of network implementation.
34.0 Demonstrate proficiency in understanding of environmental factors.
35.0 Demonstrate proficiency in understanding of peripherals.
36.0 Demonstrate proficiency in understanding of cabling and compatibility issues.
37.0 Demonstrate proficiency in understanding of network maintenance.
38.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Investigation.
39.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Users.
40.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Operators.
41.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Physical Indicators.
42.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Network.
43.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Network Tools.
44.0 Use information technology tools.
45.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
46.0 Demonstrate personal money-management concepts, procedures, and strategies.
47.0 Demonstrate proficiency in current software application.
48.0 Demonstrate proficiency in a state of the art server.
49.0 Demonstrate proficiency in Network Infrastructure Administration.
50.0 Demonstrate proficiency in Active Directory Services.
51.0 Demonstrate proficiency in secure web access using a Proxy Server.
52.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
53.0 Describe the importance of professional ethics and legal responsibilities.
54.0 Explain the importance of employability and entrepreneurship skills.
55.0 Demonstrate proficiency and knowledge to become a Certified Network Administrator.
56.0 Demonstrate proficiency and knowledge to become a Certified Network Associate.
57.0 Demonstrate proficiency in Principles of RF and Wireless Technology
58.0 Demonstrate proficiency in understanding RF System Block Diagrams.
59.0 Demonstrate proficiency in understanding antennas.

60.0 Demonstrate proficiency in understanding filters.
61.0 Demonstrate proficiency in Principles of Electricity and Electrical Signals.
62.0 Demonstrate proficiency in understanding RF transmission lines.
63.0 Demonstrate proficiency in understanding modulation.
64.0 Demonstrate proficiency in understanding wireless applications.
65.0 Demonstrate proficiency in understanding cellular generations.
66.0 Demonstrate proficiency in understanding cellular phone technology.
67.0 Demonstrate skills in mathematics for RF.
68.0 Demonstrate knowledge of electricity for RF.
69.0 Demonstrate proficiency in understanding RF component requirements.
70.0 Demonstrate proficiency in understanding phase noise.
71.0 Demonstrate proficiency in understanding digital modulation.
72.0 Demonstrate proficiency in understanding short range wireless.
73.0 Demonstrate proficiency in understanding Bluetooth.
74.0 Demonstrate proficiency in planning.
75.0 Demonstrate proficiency in wireless network standards.
76.0 Demonstrate proficiency in Principles of a Wireless Network.
77.0 Demonstrate proficiency in understanding Components of Wireless Networking.
78.0 Demonstrate proficiency in Applied Wireless Networking. (optional)
79.0 Demonstrate proficiency in Introduction to Voice Over IP (Telephony). (optional)

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Wireless Telecommunications
PSAV Number: I470305

Course Number: CTS0004
Occupational Completion Point: A
Computer Support Technician –150 Hours – SOC Code 15-1071

01.0 Demonstrate proficiency in computer and software fundamentals -- The student will be able to:
- 01.01 Develop keyboarding skills to enter and manipulate text and data.
- 01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
- 01.03 Identify and describe communications and networking systems used in workplace environments.
- 01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
- 01.05 Demonstrate basic file management skills.
- 01.06 Troubleshoot problems with computer software.
- 01.07 Describe ethical issues and problems associated with computers and information systems.
- 01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

02.0 Demonstrate proficiency in customer relations -- The student will be able to:
- 02.01 Describe and demonstrate appropriate personal hygiene and professional attire.
- 02.02 Describe and demonstrate effective listening techniques.
- 02.03 Describe and apply techniques for instilling customer confidence and satisfaction.
- 02.04 Describe and apply techniques for keeping the customer informed.
- 02.05 Describe and apply effective follow-up techniques.
- 02.06 Demonstrate discretion in interacting with customers in field and retail environments.
- 02.07 Demonstrate an understanding of basic conflict resolution.

03.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 03.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
05.02 Locate, organize and reference written information from various sources. CM 3.0
05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
05.05 Apply active listening skills to obtain and clarify information. CM 7.0
05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

Course Number: EEV0505
Occupational Completion Point: B
Computer Support Specialist -- 300 Hours – SOC Code 15-1071

06.0 Demonstrate proficiency in installation, configuration and upgrading -- The student will be able to:
06.01 Identify basic terms, concepts, and functions of system modules.
06.02 Identify procedures for replacing system modules.
06.03 Identify available IRQ's, DMA's, and I/O address.
06.04 Identify common peripherals associated cabling, and their connectors.
06.05 Identify proper procedures for installing IDE/EIDE devices.
06.06 Identify proper procedures for installing SCSI devices.
06.07 Identify proper procedures for installing peripheral devices.
06.08 Identify hardware methods of upgrading system performance.

07.0 Demonstrate proficiency in diagnosing and troubleshooting -- The student will be able to:
07.01 Identify common symptoms of computer peripherals, troubleshooting and isolation.
07.02 Identify basic troubleshooting procedures and how to elicit problem symptoms from customers.

08.0 Demonstrate proficiency in preventative maintenance **--** The student will be able to:
08.01 Identify the purpose of various preventative maintenance products and procedures.
08.02 Identify issues, procedures and devices for protection within the computing environment.
08.03 Identify RAM terminology, their locations, and physical characteristics.

09.0 Demonstrate an understanding of Motherboards **--** The student will be able to:
09.01 Identify a Motherboard.
09.02 Identify different types of Motherboards.
09.03 Describe Motherboard architecture.
09.04 Identify the purpose of CMOS and define and explain its basic parameters.

10.0 Demonstrate an understanding of processors and memory -- The student will be able to:
10.01 Distinguish between different CPU types distinguished by their basic characteristics.
10.02 Describe RAM terminology, their locations, and physical characteristics

11.0 Demonstrate proficiency in the understanding of printers -- The student will be able to:

11.01 Identify basic concepts, printer operations and components.
11.02 Identify care and service techniques and troubleshoot common problems.

12.0 Demonstrate proficiency in basic networking **--** The student will be able to:
12.01 Describe basic networking concepts.

13.0 Demonstrate proficiency in operating systems and protocols **--** The student will be able to:
13.01 Identify current major network operating systems.
13.02 Identify operating systems that best serve the clients specific network and their resources.
13.03 Identify directory services of the major network operating systems
13.04 Describe current network protocols.

14.0 Demonstrate proficiency in fault tolerance -- The student will be able to:
14.01 Describe Mirroring
14.02 Describe Duplexing
14.03 Describe Striping
14.04 Describe Volumes
14.05 Describe the need for tape backup

15.0 Demonstrate proficiency in the OSI layer model -- The student will be able to:
15.01 Define the 7 layers of the OSI model.
15.02 Identify the protocols for each OSI layer.
15.03 Identify the services for each OSI layer.
15.04 Identify and functions that pertain to each layer.

16.0 Demonstrate proficiency in networking media and topologies -- The student will be able to:
16.01 Describe the advantages of using different types of cabling.
16.02 Describe the disadvantages of using different types of cabling.
16.03 Determine the appropriate cabling to use in different network environments.
16.04 Identify the maximum lengths and speed of various network cables.
16.05 Visually identify various cable connectors.
16.06 Identify network topologies.

17.0 Demonstrate proficiency in network elements -- The student will be able to:
17.01 Identify the basic attributes, purpose, and function of Full-and half-duplexing
17.02 Identify the basic attributes, purpose, and function of WAN and LAN topologies.
17.03 Identify the basic attributes, purpose, and function of a server, workstation, and host.
17.04 Identify the basic attributes, purpose, and function of server-based networking and peer-to-peer networking.
17.05 Identify the basic attributes, purpose, and function NIC, and routers.
17.06 Identify the basic attributes, purpose, and function of broadband and base band technology.
17.07 Describe a Gateway as both a default IP router and as a method to connect dissimilar systems or protocols.

18.0 Demonstrate proficiency in installation, configuration, and troubleshooting scenario's -- The student will be able to:

18.01 Identify the correct course of action given a variety of network troubleshooting scenarios.
18.02 Explain why a given action is warranted.
18.03 Knowledge of how the network card is configured.
18.04 Demonstrate the use of network card diagnostics, including the loop back test and vendor-supplied diagnostics.
18.05 The ability to resolve hardware resource conflicts, including IRQ, DMA, and I/O Base Address.

19.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
19.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
19.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
19.03 Present information formally and informally for specific purposes and audiences. AF2.9

20.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
20.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
20.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
20.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
20.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

21.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
21.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
21.02 Explain emergency procedures to follow in response to workplace accidents.
21.03 Create a disaster and/or emergency response plan.

Course Number: CTS0006
Occupational Completion Point: C
Network Support Technician – 150 Hours – SOC Code 15-1071

22.0 Demonstrate proficiency in network components -- The student will be able to:
22.01 Visually identify and use Hubs
22.02 Visually identify and use MAUs
22.03 Visually identify and use Switching hubs
22.04 Visually identify and use Repeaters
22.05 Visually identify and use Transceivers

23.0 Demonstrate proficiency in the OSI model data link layer -- The student will be able to:
23.01 Identify bridges, what they are and why they are used.
23.02 Describe the 802 standard characteristics and specs.
23.03 Describe the function and characteristics of MAC addresses.

24.0 Demonstrate proficiency in the OSI model network layer -- The student will be able to:
24.01 Describe how routing occurs at the network layer.

- 24.02 Describe the differences between a router and a brouter.
- 24.03 Describe the differences between routable and non-routable protocols.
- 24.04 Define and explain the use of default gateways and sub networks.
- 24.05 Define and explain the need for employing unique network IDs.
- 24.06 Define and explain the difference between static and dynamic routing.

25.0 Demonstrate proficiency in the OSI model transport layer -- The student will be able to:

- 25.01 Define and explain the distinction between connectionless and connection transport.
- 25.02 Define and explain the purpose and need of name resolution.

26.0 Demonstrate proficiency in TCP/IP fundamentals -- The student will be able to:

- 26.01 Describe the concept of IP default gateways
- 26.02 Define and explain the purpose and use of DHCP, DNS, WINS, and host files.
- 26.03 Identify the main protocols that make up TCP/IP suite.
- 26.04 Define and explain the concept that every operating system and millions of hosts worldwide support TCP/IP.
- 26.05 Describe the purpose and function of Internet domain name server hierarchies (how email arrives in another country).

27.0 Demonstrate proficiency in understanding of TCP/IP addressing -- The student will be able to:

- 27.01 Demonstrate knowledge of the fundamental concepts of TCP/IP addressing.
- 27.02 Describe the A, B, and C classes of IP addresses and their default subnet mask numbers.
- 27.03 The use of ports for (HTTP, FTP, SMTP) and port numbers commonly assigned to a given service.

28.0 Demonstrate proficiency in understanding of TCP/LP configuration -- The student will be able to:

- 28.01 Define and explain the concept and use of IP proxy.
- 28.02 Identify the configuration parameters for a workstation, including IP address, DNS, default gateway, IP proxy configuration, WINS, DHCP, host name, and Internet domain name.

29.0 Demonstrate proficiency in understanding TCP/LP utilities -- The student will be able to:

- 29.01 Define and explain how to use TCP/LP utilities to test, validate, and troubleshoot IP connectivity.
- 29.02 Demonstrate the ability to use ARP.
- 29.03 Demonstrate the ability to use Telnet.
- 29.04 Demonstrate the ability to use NBTSTAT.
- 29.05 Demonstrate the ability to use TRACERT.
- 29.06 Demonstrate the ability to use NETSTAT.
- 29.07 Demonstrate the ability to use IPCONFIG and WINIPCFG.
- 29.08 Demonstrate the ability to use FTP.
- 29.09 Demonstrate the ability to use PING.

30.0 Demonstrate proficiency in understanding remote connectivity -- The student will be able to:
30.01 Define and explain the distinction between PPP and SLIP
30.02 Define and explain the purpose and function of PPTP.
30.03 Define and explain the attributes, advantages, and disadvantages of ISDN and PSTN (POTS).

31.0 Demonstrate proficiency in understanding of dial-up networking -- The student will be able to:
31.01 Describe different elements of dial-up networking.
31.02 Define and explain modem configuration parameters that must be set, including serial port IRQ, I/O address and maximum port speed.
31.03 Describe the requirements for a remote connection.

32.0 Demonstrate proficiency in understanding of network security -- The student will be able to:
32.01 Define and explain the selection of a security model (user and share level).
32.02 Define and explain standard password practices and procedures.
32.03 Define and explain the need to employ data encryption to protect network data.
32.04 Define and explain the use of a firewall.

33.0 Demonstrate proficiency in understanding of network implementation -- The student will be able to:
33.01 Define and explain what must be obtained prior to network implementation.
33.02 Demonstrate the use of administrative accounts, test accounts, passwords, IP addresses, IP configurations and relevant SOPs.

34.0 Demonstrate proficiency in understanding of environmental factors -- The student will be able to:
34.01 Describe the impact of environmental factors on computer networks.
34.02 Given a network installation scenario, identify unexpected or atypical conditions that could either cause problems for the network or signify that a problem condition already exists, including.
34.03 Identify room conditions (e.g., humidity, heat, etc.)
34.04 Identify the placement of building contents and personal effects (e.g., space heaters, TVs, radios, etc.)
34.05 Identify Computer equipment
34.06 Identify error messages

35.0 Demonstrate proficiency in understanding of peripherals -- The student will be able to:
35.01 Recognize visually, or by description, common peripheral ports, external SCSI (especially DB-25 connectors), and common network components.
  - Identify Print servers
  - Identify Hubs
  - Identify Routers
  - Identify Brouters

- Identify Bridges
- Identify Patch panels
- Identify UPSs
- Identify NICs
- Identify Token ring media filters

36.0 Demonstrate proficiency in understanding of cabling and compatibility issues -- The student will be able to:

36.01 Given an installation scenario, demonstrate awareness of troubleshooting compatibility and cabling issues.
36.02 Define and explain the consequences of trying to install an analog modem in a digital jack.
36.03 Define and explain the uses of RJ-45 connectors may differ greatly depending on the cabling.
36.04 Define and explain how patch cables contribute to the overall length of the cabling segment.
36.05 Identify the kinds of test documentation that are usually available regarding a vendor's patches, fixes, upgrades, etc.

37.0 Demonstrate proficiency in understanding of network maintenance -- The student will be able to:

37.01 Describe standard backup procedures and backup media storage practices.
37.02 Describe the need for periodic application of software patches and other fixes to the network
37.03 Describe the need to install anti-virus software on the server and workstations
37.04 Describe the need to frequently update virus signatures.

38.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Investigation -- The student will be able to:

38.01 Define and explain and follow a systematic approach to identifying the extent of a network problem, and, given a problem scenario, select the appropriate next step.
38.02 Determine whether the problem exists across the network
38.03 Determine whether the problem is workstation, workgroup, LAN or WAN
38.04 Determine whether the problem is consistent and replicable
38.05 Use standard troubleshooting methods.

39.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Users -- The student will be able to:

39.01 Define and explain and follow a systematic approach to determining whether a problem is attributable to the user or the system, and, given a problem scenario, select the appropriate next step.

- Identify the exact issue
- Recreate the problem
- Isolate the cause of the problem
- Formulate a correction to the problem
- Implement the correction to the problem
- Test

- Document the problem and the solution
- Provide feedback

40.0 Demonstrate proficiency in understanding of troubleshooting fundamentals -- Operators -- The student will be able to:

40.01 Define and explain and follow a systematic approach to determining whether a problem is attributable to the operator or the system, and, given a problem scenario, select the appropriate next step.
40.02 Define and explain the need to have a second operator perform the same task on an equivalent workstation
40.03 Define and explain the need to have a second operator perform the same task on the original operator's workstation
40.04 See whether operators are following standard operating procedure.

41.0 Demonstrate proficiency in understanding of troubleshooting fundamentals -- Physical Indicators -- The student will be able to:

41.01 Given a network-troubleshooting scenario; demonstrate awareness of the need to check for physical and logical indicators of trouble.
41.02 Identify link lights.
41.03 Identify Power lights.
41.04 Identify Error displays.
41.05 Identify Error logs and displays.
41.06 Identify Performance monitors.

42.0 Demonstrate proficiency in understanding of troubleshooting fundamentals – Network **--** The student will be able to:

42.01 Given a network problem scenario, including symptoms, determine the most likely cause or causes of the problem based on the available information.
42.02 Recognize abnormal physical conditions
42.03 Isolate and correct problems in cases where there is a fault in the physical media (patch cable)
42.04 Check the status of servers
42.05 Check for configuration problems with DNS, WINS, and HOST file
42.06 Check for viruses
42.07 Check the validity of the account name and password
42.08 Recheck operator logon procedures
42.09 Select and run appropriate diagnostics

43.0 Demonstrate proficiency in understanding of troubleshooting fundamentals -- Network Tools -- The student will be able to:

43.01 Specify the tools that are commonly used to resolve network equipment problems. Identify the purpose and function of common network tools, including:
43.02 Define and explain when to utilize crossover cable
43.03 Define and explain when to utilize hardware loop back
43.04 Define and explain when to utilize a tone generator
43.05 Define and explain when to utilize a tone locator (fox and hound).

44.0 Use information technology tools--The students will be able to:

44.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
44.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
44.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
44.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

45.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
45.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
45.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
45.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
45.04 Employ mentoring skills to inspire and teach others. LT 5.0

46.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
46.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
46.02 Describe the effect of money management on personal and career goals. FL 3.0
46.03 Develop a personal budget and financial goals. FL3.1
46.04 Complete financial instruments for making deposits and withdrawals. FL3.2
46.05 Maintain financial records. FL3.3
46.06 Read and reconcile financial statements. FL3.4
46.07 Research, compare and contrast investment opportunities.

Course Number: CTS0007
Occupational Completion Point: D
Network Specialist – 300 Hours – SOC Code 15-1071

47.0 Demonstrate proficiency in current software application -- The student will be able to:
47.01 Perform an attended installation of software.
47.02 Perform an unattended installation of software.
47.03 Upgrade from a previous version of software.
47.04 Deploy service packs.
47.05 Troubleshoot failed installations.
47.06 Monitor, manage, and trouble shoot access to files and folders.
47.07 Manage and trouble shoot access to shared folders.
47.08 Connect to local and network print devices.
47.09 Configure and manage file systems.
47.10 Implement, manage, and troubleshoot disk devices.
47.11 Implement, manage, and troubleshoot display devices.
47.12 Implement, manage, and troubleshoot mobile computer hardware.
47.13 Implement, manage, and troubleshoot input and output devices.
47.14 Update drivers.
47.15 Monitor and configure multiple processing units.
47.16 Install, configure, and troubleshoot network adapters.
47.17 Manage and troubleshoot driver signing.
47.18 Configure, manage, and troubleshoot task scheduler.

47.19 Manage and troubleshoot the use and synchronization of offline files.
47.20 Optimize and troubleshoot performance of software-desktop.
47.21 Manage hardware profiles.
47.22 Recover systems and user data.
47.23 Configure and manage user profiles.
47.24 Configure support for multiple languages or multiple locations.
47.25 Install applications by using Windows Installer Packages.
47.26 Configure and troubleshoot desktop settings.
47.27 Configure and troubleshoot fax support.
47.28 Configure and troubleshoot accessibility services.
47.29 Configure and troubleshoot the TCP/LP protocol.
47.30 Connect to computers using dial-up networking.
47.31 Connect to shared resources on a shared network.
47.32 Encrypt data on a hard disk by using Encrypting File System.
47.33 Implement, configure, manage, and troubleshoot local group policy.
47.34 Implement, configure, manage, and troubleshoot local user accounts.
47.35 Implement, configure, manage, and troubleshoot local user authentication.
47.36 Implement, configure, manage, and troubleshoot a security configuration.

48.0 Demonstrate proficiency in a state of the art server **--** The student will be able to:
48.01 Create an unattended answer file by using setup manager to automate the installation of a server.
48.02 Create and configure automated methods for installation of a server.
48.03 Upgrade a server.
48.04 Deploy services packs.
48.05 Troubleshoot failed installations.
48.06 Install and configure network services for interoperability.
48.07 Monitor, configure, troubleshoot and control access to printers.
48.08 Monitor, configure, troubleshoot and control access to files, folders, and shared folders.
48.09 Configure, manage, and troubleshoot a stand-alone Distributed File System (DFS).
48.10 Configure, manage, and troubleshoot a domain-based distributed file system.
48.11 Monitor, configure, troubleshoot, and control access to files and folders via web services.
48.12 Monitor, configure, troubleshoot and control access to web sites
48.13 Configure hardware devices.
48.14 Configure driver-signing options.
48.15 Update device drivers.
48.16 Troubleshoot problems with hardware.
48.17 Monitor and optimize usage of system resources.
48.18 Set priorities, and start and stop process.
48.19 Optimize disk performance.
48.20 Manage and optimize availability of system state data and user data.
48.21 Recover systems and user data by using a Backup.
48.22 Troubleshoot system restoration by using Safe Mode
48.23 Recover system and user data by using Safe Mode.
48.24 Recover systems and user data by using the recovery console
48.25 Configure and manage user profiles.

48.26 Monitor, configure, and troubleshoot disks and volumes.
48.27 Configure data compression.
48.28 Monitor and configure disk quotas.
48.29 Recover from disk failures.
48.30 Install, configure, and troubleshoot shared access.
48.31 Install, configure, and troubleshoot network protocols.
48.32 Install, configure, and troubleshoot a virtual private network.
48.33 Install, configure, and troubleshoot network services.
48.34 Configure, monitor, and troubleshoot remote access.
48.35 Install, configure, monitor and troubleshoot terminal services.
48.36 Configure the properties of a connection.
48.37 Install, configure, and troubleshoot network adapters and drivers.
48.38 Encrypt data on a hard disk by using Encrypting File System (EFS).
48.39 Implement, configure, manage and troubleshoot policies in a software-product environment.
48.40 Implement, configure, manage and troubleshoot auditing.
48.41 Implement, configure, manage and troubleshoot local accounts.
48.42 Account policy.
48.43 Implement, configure, manage and troubleshoot security by using the Security Configuration Tool Set.

49.0 Demonstrate proficiency in Network Infrastructure Administration **--** The student will be able to:
49.01 Install the DNS server service.
49.02 Configure a root name server.
49.03 Configure Zones.
49.04 Configure a caching-only server.
49.05 Configure a DNS Client.
49.06 Configure zones for dynamic updates.
49.07 Test the DNS server services.
49.08 Implement a delegated zone for DNS.
49.09 Manually create DNS resource records.
49.10 Install the DHCP Service.
49.11 Create and manage DHCP scopes, super scopes and multicast services.
49.12 Configure DHCP for DNS integration.
49.13 Authorize a DHCP server in Active Directory.
49.14 Configure inbound connections.
49.15 Create remote access policy.
49.16 Configure a remote access profile.
49.17 Configure a VPN.
49.18 Configure a VPN.
49.19 Configure multilink. Connections.
49.20 Configure routing and remote access for DHCP integration.
49.21 Manage and monitor remote access.
49.22 Configure authentication protocols.
49.23 Configure encryption protocols.
49.24 Configure remote access policy.
49.25 Install and configure TCP/IP.
49.26 Install the NW Link protocol.
49.27 Configure network bindings.
49.28 Configure TCP/LP packet filters.

49.29 Configure and troubleshoot network protocol security.
49.30 Manage and monitor network traffic.
49.31 Enable IPSec.
49.32 Configure IPSec for Transport mode.
49.33 Configure IPSec for Tunnel mode.
49.34 Customize IPSec policies and rules.
49.35 Manage and monitor IPSec.
49.36 Install, configure, and troubleshoot WINS.
49.37 Configure WINS replication.
49.38 Configure Net BIOS name resolution.
49.39 Manage and monitor WINS.
49.40 Update a routing table by means of static routes.
49.41 Implement demand-dial routing.
49.42 Manage and monitor border routing.
49.43 Manage and monitor internal routing.
49.44 Manage and monitor IP routing protocols.
49.45 Install Internet connections sharing.
49.46 Install NAT.
49.47 Configure NAT properties.
49.48 Configure NAT interfaces.
49.49 Install and configure Certificate Authority.
49.50 Create certificates.
49.51 Issue certificates.
49.52 Revoke certificates.
49.53 Remove Encrypting File System (EFS) recovery keys.

50.0 Demonstrate proficiency in Active Directory Services -- The student will be able to:
50.01 Install active Directory.
50.02 Create sites.
50.03 Create subnets.
50.04 Create site links.
50.05 Create site links bridges.
50.06 Create connection objects.
50.07 Create global catalog servers.
50.08 Move server objects between sites.
50.09 Transfer Operations Master roles.
50.10 Verify Active Directory installation.
50.11 Implement an OU structure.
50.12 Perform an authoritative restore of Active Directory.
50.13 Recover from a system failure.
50.14 Integrate an Active Directory DNS with a non-Active Directory DNS.
50.15 Configure zones for dynamic updates.
50.16 Manage replication of DNS Data.
50.17 Create a group policy object.
50.18 Link existing GPO.
50.19 Delegate administrative control of group policy.
50.20 Modify group policy.
50.21 Control user environments by using administrative templates.
50.22 Assign script policies to users and computers.
50.23 Deploy software b using group policy.
50.24 Maintain software by using group policy.

50.25 Configure Deployment options Troubleshoot common problems that occur during software deployment.
50.26 Manage network configuration by using group policy.
50.27 Install an image on an RIS client computer.
50.28 Configure remote installation options.
50.29 Troubleshoot RIS problems.
50.30 Manage images for performing remote installations.
50.31 Configure RIS security.
50.32 Authorize and RIS server.
50.33 Grant computer account creation rights.
50.34 Pre-stage RIS client Computers for added security and load balancing.
50.35 Move Active Directory objects.
50.36 Publish resources in Active Directory.
50.37 Locate objects in active Directory.
50.38 Create and manage accounts manually or by scripting.
50.39 Control access to Active Directory objects.
50.40 Delegate administrative control of objects in Active Directory.
50.41 Monitor, Maintain and troubleshoot domain controller performance.
50.42 Monitor, Maintain, and troubleshoot Active Directory components.
50.43 Manage inter-site replication.
50.44 Manage intra-site replication.
50.45 Apply security policies by using group policy.
50.46 Create, analyze and modify security configurations by using Security Configurations, Analysis and Security Templates.
50.47 Implement an audit policy.
50.48 Monitor and Analyze Security Events.

51.0 Demonstrate proficiency in secure web access using Proxy Server -- The student will be able to:

51.01 Install, configure, and administer a Proxy Server
51.02 Describe the architecture.
51.03 Identify important registry entries.
51.04 Enable error logging.
51.05 Identify and use troubleshooting resources.
51.06 Troubleshoot Internet access problems.
51.07 Protect a network.
51.08 Implement security.
51.09 Identify specific performance issues.
51.10 Explain the impact of security on performance.
51.11 Use Performance Monitor to determine specific performance problems.
51.12 Optimize performance.
51.13 Balance Internet access across multiple Proxy Server installations.
51.14 Use multiple Proxy Server installations to enhance performance.
51.15 Identify potential issues when using Proxy Server in an intranet (with no access to the Internet).
51.16 Implement fault tolerance.
51.17 Plan a Proxy Server site based on a given situation.
51.18 Determine the appropriate type of Internet access for various users.
51.19 Determine the hardware and software required for a specific configuration.
51.20 Arrange for proper connectivity with an Internet Service Provider (ISP).

51.21 Create a rollout plan for integrating Proxy Server in an existing environment.

52.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

52.01 Describe the nature and types of business organizations. SY 1.0
52.02 Explain the effect of key organizational systems on performance and quality.
52.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
52.04 Explain the impact of the global economy on business organizations. HE 2.0

53.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

53.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
53.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
53.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
53.04 Interpret and explain written organizational policies and procedures. ELR 2.0

54.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

54.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
54.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
54.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
54.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
54.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
54.06 Identify and exhibit traits for retaining employment. ECD 7.0
54.07 Identify opportunities and research requirements for career advancement. ECD 8.0
54.08 Research the benefits of ongoing professional development. ECD 9.0
54.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: CTS0008
Occupational Completion Point: E
Network Administrator – 300 Hours – SOC Code 15-1071

55.0 Demonstrate proficiency and knowledge to become a Certified Network Administrator **--** The student will be able to:

55.01 Define and explain NW 5 and the role of NDS.
55.02 Define and explain how to use a workstation.
55.03 Define and explain network access for users.
55.04 Define and explain Novell Distributed Print Services.
55.05 Define and explain network file system.
55.06 Define and explain file system security.
55.07 Define and explain login scripts for NDS objects.
55.08 Define and explain NDS security.
55.09 Define and explain network applications with ZEN works.
55.10 Identify workstations in an NDS environment.
55.11 Define and explain basic network services in a multi context environment.

- 55.12 Define and explain how to manage and install NW user licenses.
- 55.13 Have an Introduction to NetWare 5 and NDS.
- 55.14 Define and explain how to use a Workstation.
- 55.15 Define and explain how to setup and manage network access for users.
- 55.16 Define and explain how to setup Printing with Novell Distributed Print Services.
- 55.17 Define and explain how to setup manage the file system.
- 55.18 Define and explain how to setup and manage file system security.
- 55.19 Create and manage login scripts.
- 55.20 Define and explain how to Manage NDS security.
- 55.21 Define and explain how to distribute and manage network applications with ZEN works.
- 55.22 Define and explain how to manage workstations in an NDS environment with ZEN works.
- 55.23 Define and explain how to manage resources in a multi context environment.
- 55.24 Define and explain how to install NetWare 5.

56.0 Demonstrate proficiency and knowledge to become a Certified Network Associate -- The student will be able to:

- 56.01 Identify the major components of the network system.
- 56.02 Examine the primary types and use of network cabling.
- 56.03 Compare the functions or usage of a Local Area Network (LAN) versus Wide Area Network (WAN).
- 56.04 Describe the standard topologies and the advantages and disadvantages of each.
- 56.05 Discuss the functions of each of the seven layers of the OSI reference model.
- 56.06 Describe the basic process of communication between the layers of the OSI reference model.
- 56.07 Define the major network access methods and outline the key features of each.
- 56.08 Describe the functions and features of devises used at Layers One, Two and Three of the OSI model.
- 56.09 Explain the significance of each of the following to the following to a network system: IP addresses and classes and reserved address space.
- 56.10 Identify and described common routed and routing protocols.

Course Number: CTS0009
Occupational Completion Point: F
Wireless Telecommunications Administrator – 300 Hours – SOC Code 15-1071

57.0 Demonstrate proficiency in Principles of RF and Wireless Technology -- The student will be able to:

- 57.01 Define and explain Radio Frequency (RF) Waves.
- 57.02 Define and explain Frequency/Wavelength.
- 57.03 Define and explain the Electromagnetic spectrum.
- 57.04 Define and explain how to use the spectrum.
- 57.05 Describe the Federal Communications Commission (FCC).
- 57.06 Define and explain Velocities.
- 57.07 Define and explain Disparities.

57.08 Define and explain Attenuation, Trapping, Ducting.
57.09 Define and explain Power (DB and DBM).
57.10 Define and explain Reflection and scattering.
57.11 Define and explain Path loss.
57.12 Define and explain Phase.
57.13 Define and explain Characteristics.
57.14 Define and explain Compensation methods.
57.15 Define and explain Matching.
57.16 Define and explain Phase locked.
57.17 Define and explain Phased Array.
57.18 Define and explain Frequency Reuse.
57.19 Define and explain Channels vs. Bandwidth.

58.0 Demonstrate proficiency in understanding RF System Block Diagrams -- The student will be able to:
58.01 Identify RF components (The Block Diagram).
58.02 Identify, define and explain the functionality of Oscillators.
58.03 Identify, define and explain the functionality of Attenuators.
58.04 Identify, define and explain the functionality of Modulators.
58.05 Identify, Define and explain the functionality of Power Amplifiers.
58.06 Define and explain Linearity.
58.07 Identify, define and explain the functionality of Couplers.
58.08 Identify, define and explain the functionality of Detectors.

59.0 Demonstrate proficiency in understanding antennas -- The student will be able to:
59.01 Identify the different types of antennas.
59.02 Define and explain TX antennas.
59.03 Define and explain RX antennas.
59.04 Define and explain Gain antennas.
59.05 Define and explain Architecture antennas.
59.06 Define and explain Smart and Complex antennas.
59.07 Define and explain Omni directional antennas.

60.0 Demonstrate proficiency in understanding filters -- The student will be able to:
60.01 Define and explain the different types of filters.
60.02 Identify ISI filters.
60.03 Describe Inter modulation.
60.04 Identify Low Noise Amplifiers.
60.05 Identify Mixers.
60.06 Identify IF Amplifiers.
60.07 Identify Demodulators.

61.0 Demonstrate proficiency in Principles of Electricity and Electrical Signals -- The student will be able to:
61.01 Describe Electrical signals in time and Frequency.
61.02 Describe Audio Signals.
61.03 Describe Video Signals.
61.04 Describe Digitizing Analog Signals.
61.05 Describe Pulse Code.
61.06 Describe MPEG-2.
61.07 Describe Data Signals.

61.08 Describe Types of data.
61.09 Describe Priorities.
61.10 Describe Bit Error Rate.
61.11 Describe Parity.
61.12 Describe CRC.
61.13 Describe TTL.

62.0 Demonstrate proficiency in understanding RF transmission lines -- The student will be able to:
62.01 Define and explain a Wave-guide.
62.02 Define and explain Coaxial.
62.03 Define and explain Micro strip.
62.04 Define and explain Impedance.
62.05 Define and explain Reflection.
62.06 Define and explain Matching.

63.0 Demonstrate proficiency in understanding modulation --The student will be able to:
63.01 Define and explain Carrier.
63.02 Define and explain AM.
63.03 Define and explain FM.
63.04 Define and explain Signal to Ratio S/N.
63.05 Define and explain QPSK.
63.06 Define and explain MPSK.
63.07 Define and explain GPSK.
63.08 Define and explain QAM.
63.09 Define and explain Spectral Re-growth / QPSK.
63.10 Define and explain CDMA.
63.11 Define and explain TDMA.
63.12 Define and explain SDMA.
63.13 Define and explain FDMA.
63.14 Define and explain AMPS.
63.15 Define and explain DAMPS.
63.16 Define and explain GSM.
63.17 Define and explain PCS.

64.0 Demonstrate proficiency in understanding wireless applications -- The student will be able to:
64.01 Define and explain Wireless Services.
64.02 Define and explain Direct Broadcast Satellite (DBS).
64.03 Define and explain Paging.
64.04 Define and explain Wireless Phones (PCS, Mobile Satellite).
64.05 Define and explain Carriers.
64.06 Define and explain Technologies.
64.07 Define and explain Wireless Application Features.
64.08 Define and explain Wireless Local Loop (WLL).
64.09 Define and explain Wireless Data Terminal.
64.10 Define and explain Mobile Satellite.
64.11 Define and explain PTN.
64.12 Define and explain MTSO.
64.13 Define and explain GPS.

65.0 Demonstrate proficiency in understanding cellular generations -- The student will be able to:
65.01 Describe 1st Generation Cellular.
65.02 Describe 2nd Generation Cellular.
65.03 Describe 2nd-½-Generation Cellular.
65.04 Describe 3rd Generation Cellular.
65.05 Define and explain Goals.
65.06 Describe Technical Challenges.
65.07 Define and explain 8psk.
65.08 Define and explain Data rates.
65.09 Define and explain MPEG-4.
65.10 Define and explain ARIB.
65.11 Explain Business Challenges.
65.12 Define and explain Costs.
65.13 Explain 2-½-technology migration.

66.0 Demonstrate proficiency in understanding cellular phone technology **--** The student will be able to:
66.01 Define and explain CDMA.
66.02 Define and explain IMT-2000.
66.03 Define and explain EDGE.
66.04 Define and explain GSM.
66.05 Define and explain WCDMA.
66.06 Define and explain CDMA 2000.
66.07 Define and explain Spread Spectrum.

67.0 Demonstrate skills in mathematics for RF -- The student will be able to:
67.01 Define the attributes of DB.
67.02 Identify the characteristics of RF Waves.

68.0 Demonstrate knowledge of electricity for RF -- The student will be able to:
68.01 Define and explain Electric Fields.
68.02 Define and explain Magnetic Fields.
68.03 Define and explain Electromagnetic fields for component design.
68.04 Define and explain Frequencies.
68.05 Define and explain Wavelengths.
68.06 Define and explain Impedance.
68.07 Define and explain Power.
68.08 Define and explain Phase.
68.09 Define and explain Polarizations.
68.10 Define and explain Insertion Loss/Gain.
68.11 Define and explain Cascading.
68.12 Define and explain Reflected Power.
68.13 Define and explain Return Loss.
68.14 Define and explain S Parameters.
68.15 Define and explain Matching networks.

69.0 Demonstrate proficiency in understanding RF component requirements -- The student will be able to:
69.01 Define and explain Phase Locked Oscillators.
69.02 Define and explain a Modulator.

69.03 Define and explain Power Amplifiers.
69.04 Define and explain Antennas.
69.05 Define and explain LNA.
69.06 Define and explain Mixers and IF amplifiers.
69.07 Define and explain Filters.

70.0 Demonstrate proficiency in understanding phase noise -- The student will be able to:
70.01 Define and explain BER Degradation.
70.02 Define and explain Error Vector Magnitudes.

71.0 Demonstrate proficiency in understanding digital modulations -- The student will be able to:
71.01 Define and explain QPSK.
71.02 Define and explain Pi/4DQPSK.
71.03 Define and explain 16 QAM.
71.04 Define and explain GMSK.

72.0 Demonstrate proficiency in understanding short-range wireless -- The student will be able to:
72.01 Define and explain Propagation.
72.02 Define and explain Path Loss.
72.03 Define and explain Fading.
72.04 Define and explain Multi paths.
72.05 Define and explain Interference.
72.06 Define and explain IR vs. RF.
72.07 Define and explain Frequency Usages.
72.08 Define and explain how to Calculate Range.

73.0 Demonstrate proficiency in understanding Bluetooth -- The student will be able to:
73.01 Define and explain IEEE 802.11.
73.02 Define and explain Home RF.
73.03 Define and explain IrDA.
73.04 Define and explain HIPERLAN.

74.0 Demonstrate proficiency in planning -- The student will be able to:
74.01 Describe Cellular Topologies.
74.02 Describe Wireless LAN Topologies.
74.03 Describe WLL.
74.04 Describe Ad Hoc Networking.
74.05 Describe Site Planner software.

75.0 Wireless networking standards -- The student will be able to:
75.01 Define and explain 802.11a.
75.02 Define and explain 802.11b.
75.03 Define and explain Bluetooth.

76.0 Demonstrate proficiency in Principles of a Wireless Network -- The student will be able to:
76.01 Define and explain different Types of Wireless.
76.02 Define and explain Handheld Devices.
76.03 Define and explain Mobile Communications.

76.04 Define and explain Satellite Communications.
76.05 Define and explain Wireless Local Loop (WLL).
76.06 Define and explain Building-to-Building networking.
76.07 Define and explain Site Planning.
76.08 Define and explain Wireless Integration.
76.09 Define and explain Wireless Management.
76.10 Describe the need for Quality of Service (QOS).

77.0 Demonstrate proficiency in understanding components of wireless networking -- The student will be able to:
77.01 Identify Access Points.
77.02 Identify Repeaters.
77.03 Identify Network interface cards.
77.04 Identify Power over Ethernet.

78.0 Demonstrate proficiency in applied wireless networking (optional) -- The student will be able to:
78.01 Utilize an In building Lab.
78.02 Utilize a Building-to-Building Lab.
78.03 Utilize a Cellular Lab.
78.04 Utilize a Satellite Lab.

79.0 Demonstrate proficiency in introduction to Voice Over IP Telephony (optional) -- The student will be able to:
79.01 Define voice over IP (Telephony Standards).

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Printing Technology**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	PSAV
Program Number	I480205
CIP Number	0648020101
Grade Level	30, 31
Standard Length	990 Hours
Teacher Certification	PRINTING @7 G
CTSO	SkillsUSA
SOC Codes (all applicable)	51-5022 43-9031
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for initial employment in the Printing and Graphics Communications Industry.

The course content will include but is not limited to the following: Administrative support operations, pre-press/imaging operations, press operations and finishing operations. The course content should also include training in communication leadership, human relations, employability skills; and safe, efficient work practices.

This program also prepares individuals to set up, operate and maintain preparation, printing, binding and finishing equipment used in the printing and Graphic Communications Industry. Graduates of this program will also be prepared for further specialized training and education in Graphic Arts Technology and other related technologies.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Printing and Graphic Communications Industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of one program, two occupational completion points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following associations are available to instructors: PAF (Printing Association of Florida), PIA (Printing Industries of America), NAPL (National Association of Printers and Lithographers), GATF (Graphic Arts Technical Foundation), IGAEA (International Graphic Arts Educational Association), IAGA (International Association of Graphic Artists).

Certification of a program by industry or industry related organization is an important part of a performance-based concept. Certification validates and supports the program structure and relevance.

The standard length of this program is 990 hours.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	GRA0020 GRA0021	Digital Publishing Assistant 1 Digital Publishing Assistant 2	247 Hours 248 Hours	51-5022 51-5022
B	GRA0022 GRA0023	Desktop Publishing Specialist 1 Desktop Publishing Specialist 2	247 Hours 248 Hours	43-9031 43-9031

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

The PSAV component of this program (I480205) has a statewide articulation agreement approved by the Articulation Coordinating Committee:

Graphics Technology (648.020101) – 6 Credits

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate an understanding of safety and first aid practices.
02.0 Demonstrate an understanding of graphic communication and processes.
03.0 Demonstrate proficiency in art and copy preparation.
04.0 Demonstrate proficiency in using image manipulation programs.
05.0 Demonstrate proficiency in basic imaging competencies.
06.0 Demonstrate proficiency in the use of type and typography.
07.0 Demonstrate proficiency in using page lay out operations.
08.0 Demonstrate proficiency in scanning (image capture) operations.
09.0 Demonstrate an understanding of vector base graphics programs.
10.0 Demonstrate proficiency in electronic pre-press operations.
11.0 Demonstrate proficiency in using image manipulation programs
12.0 Demonstrate mathematics knowledge and skills.
13.0 Demonstrate science knowledge and skills.
14.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
15.0 Demonstrate language arts knowledge and skills.
16.0 Solve problems using critical thinking skills, creativity and innovation.
17.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
18.0 Demonstrate proficiency in advanced operation of a black and white digital production printing system.
19.0 Demonstrate proficiency in the use of type and typography.
20.0 Demonstrate proficiency in page layout operations.
21.0 Demonstrate proficiency in scanning (image capture) operations.
22.0 Demonstrate an understanding of a vector base graphics program.
23.0 Demonstrate proficiency in electronic pre-press operations.
24.0 Demonstrate proficiency in making and using files in portable document format.
25.0 Demonstrate proficiency in performing basic finishing and distribution competencies.
26.0 Demonstrate an understanding of color principles as applied to the preparation, production, evaluation, and correction of color printing.
27.0 Demonstrate the ability to maintain and troubleshoot normal operating problems on a digital printing system.
28.0 Use information technology tools.
29.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
30.0 Demonstrate personal money-management concepts, procedures, and strategies.
31.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
32.0 Describe the importance of professional ethics and legal responsibilities.
33.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Digital Printing Technology
PSAV Number: I480205

Course Number: GRA0020
Occupational Completion Point: A
Digital Publishing Assistant – 495 Hours – SOC Code 43-9031

01.0 Demonstrate an understanding of safety and first aid practices -- The student will be able to:

01.01 Discuss the importance of the Material Safety Data Sheets (MSDS).
01.02 Practice proper safety procedures when operating equipment.
01.03 Pass a general lab safety test.
01.04 Demonstrate acceptable employee health habits.
01.05 Demonstrate knowledge of the "Florida Right-to-Know Law" as recorded in Florida Statutes, Chapter 442.
01.06 Pass a safety test in an individual’s specialty area(s).
01.07 Practice approved methods to dispose of waste materials.
01.08 Read, comprehend and follow instructions on warning labels.
01.09 Demonstrate industry standard behaviors when working with others.
01.10 Demonstrate a working knowledge of the safety color code.

02.0 Demonstrate an understanding of graphic communications and processes -- The student will be able to:

02.01 Define the role of graphics in the free enterprise system.
02.02 Identify printing markets and types of printing business.
02.03 List printing’s ranking among other industries.
02.04 Identify the major printing processes.
02.05 List the advantages of each major printing process.
02.06 List the disadvantages of each major printing process.
02.07 Identify the products produced by each major printing process.
02.08 List the flow of printing product from initial need to a final product.
02.09 List the technical production flow from idea to a finished product.
02.10 Identify major occupations in the graphic arts.
02.11 List the major responsibilities for each occupation.
02.12 Identify basic salary/wage expectation ranges for local area.
02.13 Explain the electro photographic and ink jet processes used to produce digitally printed material.
02.14 Identify the various function screens on the user interface for a digital production printing system.

03.0 Demonstrate proficiency in art and copy preparation -- The student will be able to:

03.01 Prepare comprehensive layouts including a finished working dummy.
03.02 Employ the use of printers’ measurements to compute inches and fractions, points and picas, decimals, percentages, and proportions.
03.03 Use copy fitting and mark-up procedures to specify type sizes, styles etc.
03.04 Follow a job ticket to program and run standard jobs using a black & white digital production printing system.

03.05 Program and load stock needed for a standard job.
03.06 Demonstrate basic proficiency in the operation of the scanner component of a black & white digital production printing system.
03.07 Demonstrate basic proficiency in the operation of the printer component of a black & white digital production printing system.
03.08 Demonstrate basic proficiency in the operation of the delivery and binding components of a black & white digital production printing system.

04.0 Demonstrate proficiency in using image manipulation programs -- The student will be able to:
04.01 Use a variety of paint/edit/selection tools and special effects filters to manipulate digital images.
04.02 Identify and apply industry standards and practices in file image compression, storage, and retrieval.
04.03 Apply image correction and color correction procedures/tools to continuous tone files.
04.04 Control image editing software to incorporate tone reproduction characteristics into continuous tone files.
04.05 Use photo editing software to incorporate output requirements into continuous tone files.

Course Number: GRA0021
Occupational Completion Point: A
Digital Publishing Assistant – 495 Hours – SOC Code 43-9031

05.0 Demonstrate proficiency in basic electronic imaging competencies **--** The student will be able to:

05.01 Read and comprehend production information on a job jacket/ticket.
05.02 Identify the various kinds of items that can be designed and produced using desktop publishing and digital production printing systems.
05.03 Demonstrate understanding of PostScript software capabilities.
05.04 Select appropriate software for word processing, graphics, scanning and page layout.
05.05 Organize a file management system for opening, copying, saving and deleting files.
05.06 Demonstrate file management operations for opening, copying, saving and deleting files.
05.07 Prepare a dummy for a multi-page signature.
05.08 Demonstrate an understanding of data exchange.

06.0 Demonstrate proficiency in the use of type and typography -- The student will be able to:
06.01 Measure copy/text in points and picas using a line gauge.
06.02 Identify x-height, mean-line, baseline, ascenders, descanters, and their roles in measuring and designing with type.
06.03 Identify caps, lowercase, uppercase, small caps and ligatures.
06.04 Define dingbats, bullets, rules, and symbols and their uses in publications.
06.05 Distinguish between display (headline) type and body (text) type by their point sizes and styles.
06.06 Identify the basic type styles and their uses.
06.07 Define the "weight" and "posture" of type.

06.08 Distinguish between serif and sans serif type styles.
06.09 Define letter spacing and kerning of type characters.
06.10 Define word spacing and the relationship of em and en in paragraph spacing.
06.11 Define line spacing and explain the measurement principles for the leading of text.
06.12 Define the type arrangements: flush left, ragged right, flush right, ragged left, centered, justified, and forced justified.
06.13 Define and demonstrate copy fitting.

07.0 Demonstrate proficiency in using page layout operations -- The student will be able to:
07.01 Demonstrate how to markup a copy for production of a printed piece.
07.02 Select appropriate page layout software for a given job.
07.03 Log-on/boot-up and print out a page layout program and demonstrate functional knowledge of computer commands/codes/menus/palette for the software in use.
07.04 Demonstrate text alignment, element positioning and rules of page design for printed matter.
07.05 Demonstrate a proficiency in conducting basic search operations.
07.06 Place copy from word processing program to a page layout program according to job specifications.
07.07 Proofread, edit and make corrections/adjustment to copy on screen.
07.08 Download fonts.
07.09 Place graphics, rules, and dingbats from an existing file into a publication.
07.10 Demonstrate the procedure for cropping graphics electronically.
07.11 Create a 2-sided, 3-panel brochure using graphics and text for publication.
07.12 Create a 4-page newsletter using windows, blocks, text, graphics, frames and headings.
07.13 Create a 2-page newsletter using drop caps for paragraph openings, wraparound (runaround) and graphics.
07.14 Create a printed piece using tints, reverses and manipulated type for effect.
07.15 Produce a multicolor flyer using electronic spot color separations.
07.16 Demonstrate knowledge of available page layout programs - capabilities, advantage, and disadvantages.
07.17 Use electronic dictionary, spell checker, and automatic hyphenation.

08.0 Demonstrate proficiency in scanning (image capture) operations -- The student will be able to:
08.01 Identify scanner hardware and its basic components and operations.
08.02 Identify basic scanner software, its uses and limitations.
08.03 Demonstrate appropriate scanner/program operations for continuous tone copy.
08.04 Place scanned graphics/photos into existing page layout program.
08.05 Use a digital camera for capturing images intended for print reproduction.
08.06 Clean and prepare prints and slides for final scans.
08.07 Properly handle customer original art.

09.0 Demonstrate an understanding of a vector base graphics programs -- The student will be able to:
09.01 Log-on/boot-up vector-based graphics program and demonstrate a functional knowledge of commands/codes/menus/tools and procedures for their uses.
09.02 Draw a design appropriate for a given job using a graphics program.

09.03 Create a design using tints, fills and paint for a given job using a graphics program.
09.04 Create a design using manipulated type (rotated, circled, extended, etc.) for a publication.
09.05 Trace a drawing/photograph using a graphics program.
09.06 Create a design/publication using electronic clip art.

10.0 Demonstrate proficiency in electronic pre-press operations -- The student will be able to:
10.01 Define the application of digital photography in electronic imaging.
10.02 Identify and compare digital proofs.
10.03 Identify and compare networking systems.
10.04 Demonstrate an understanding of the PostScript page description language.
10.05 Compare the leading operating systems in performance, use and capabilities.
10.06 Describe the strengths and weaknesses of TIFF, EPS, PICT, JPEG and DCS in a Postscript environment.
10.07 Use a file compression utility for file transfer or storage.
10.08 Create a single color layout using clip art.
10.09 Create a single color layout using work and turn.
10.10 Change contrast using tint screens and shading techniques.
10.11 Create a logo design on a computer and integrate it into a brochure design.
10.12 Produce special effects type using a graphics application.
10.13 Produce a multicolor job that includes scans, text and spot color artwork.
10.14 Prepare page layout files containing graphic images for remote output.
10.15 Follow instructions to produce, modify or output files according to a customer supplied criteria.
10.16 Produce a color scan.
10.17 Use a photo manipulation program to perform basic color correction and basic image cloning.
10.18 Describe the characteristics of PostScript and non-PostScript output devices.
10.19 Configure software and hardware for output to PostScript and non-PostScript devices.
10.20 Evaluate image (output) quality.
10.21 Submit files to and use network, non-network output devices.

11.0 Demonstrate proficiency in using image manipulation programs -- The student will be able to:
11.01 Use a variety of paint/edit/selection tools and special effects filters to manipulate digital images.
11.02 Identify and apply industry standards and practices in file image compression, storage, and retrieval.
11.03 Apply image correction and color correction procedures/tools to continuous tone files.
11.04 Control image editing software to incorporate tone reproduction characteristics into continuous tone files.
11.05 Use photo editing software to incorporate output requirements into continuous tone files.

12.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
12.01 Demonstrate knowledge of arithmetic operations. AF3.2
12.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4

12.03 Construct charts/tables/graphs using functions and data. AF3.5

13.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0

13.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1

13.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

14.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

14.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0

14.02 Locate, organize and reference written information from various sources. CM 3.0

14.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0

14.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0

14.05 Apply active listening skills to obtain and clarify information. CM 7.0

14.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0

14.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

15.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0

15.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4

15.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5

15.03 Present information formally and informally for specific purposes and audiences. AF2.9

16.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:

16.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0

16.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0

16.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0

16.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

17.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:

17.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0

17.02 Explain emergency procedures to follow in response to workplace accidents.

17.03 Create a disaster and/or emergency response plan.

Course Number: GRA0022
Occupational Completion Point: B
Desktop Publishing Specialist – 495 Hours – SOC Code 43-9031

18.0 Demonstrate proficiency in advanced operation of a black & white digital production printing system -– The student will be able to:

18.01 Use the system interface to adjust image tone reproduction quality.

18.02 Use the system interface to modify page images through the functions of copy, mask, duplicate, delete, move, add, replace, rotate, and overlay images.
18.03 Use the merge library function.
18.04 Program and run a job with tab stock.
18.05 Program and run a job with folded signatures.
18.06 Program and set-up the various in-line finishing and binding options.
18.07 Program and run productivity features including cover sheets, job separator sheets, and the use of saved job tickets.
18.08 Program and run jobs on a digital color printing system.
18.09 Evaluate and adjust color print quality.
18.10 Apply troubleshooting and problem solving strategies on both black & white and color digital printing systems.

19.0 Demonstrate proficiency in the use of type and typography -- The student will be able to:
19.01 Identify strategies and software used for font management in desktop publishing.
19.02 Set-up and use font management software.
19.03 Use the type scaling, kerning, tracking, and baseline shift typographic functions.
19.04 Demonstrate the comparative typography weaknesses and strengths of word processing software and page layout software.
19.05 Identify the difference between formatted and unformatted text files.
19.06 Demonstrate the correct use of paragraph and character style definitions in page layout software applications.

20.0 Demonstrate proficiency in using page layout operations--The student will be able to:
20.01 Set up column grids for electronic page layout according to job specifications.
20.02 Set up/select appropriate pagination for a given job.
20.03 Demonstrate the uses of footers and headers.
20.04 Set text with appropriate margins, formatting, gutters, leading, headings etc.
20.05 Define and apply multiple master pages to a long document.
20.06 Merge documents in part or in their entirety.
20.07 Use paths for type and for image clipping.
20.08 Modify and redefine page and document specifications.
20.09 Apply section numbering for long documents.
20.10 Prepare document index page.
20.11 Save document as a PostScript file.
20.12 Determine and set preferences for specific document production requirements.

21.0 Demonstrate proficiency in scanning (image capture) operations -- The student will be able to:
21.01 Clean and prepare prints and slides for final scans.
21.02 Calculate needed scan resolution.
21.03 Demonstrate how to calculate needed percentage of enlargement/reduction.
21.04 Properly handle customer original art.
21.05 Scan reflection and transmission originals including following customer specifications for cropping, sizing, file formats, and resolution.
21.06 Acquire files from Photo-CD and CD-ROM disks.
21.07 Set-up and use Optical Character Recognition (OCR) software to capture text pages and prepare a document for editing in word processing application.
21.08 Locate and download specified files from the WWW/Internet.
21.09 Transfer printed text to digital files using OCR hardware and software.

Course Number: GRA0023
Occupational Completion Point: B
Desktop Publishing Specialist – 495 Hours – SOC Code 43-9031

22.0 Demonstrate an understanding of a vector base graphics programs -- The student will be able to:
- 22.01 Draw a design appropriate for a given job using a graphics program.
- 22.02 Create a design using tints, fills and paint for a given job using a graphics program.
- 22.03 Create a design using manipulated type (rotated, circled, extended, etc.) for a publication.
- 22.04 Trace a drawing/photograph using a graphics program.
- 22.05 Organize and use typography, photography and illustration elements to communicate information in print.

23.0 Demonstrate proficiency in electronic pre-press operations -- The student will be able to:
- 23.01 Calibrate a desktop color scanner.
- 23.02 Calibrate a color monitor.
- 23.03 Follow instructions to produce, modify or output files according to specified production workflow standards.
- 23.04 Describe the characteristics of PostScript and non-PostScript output devices.
- 23.05 Configure software and hardware for output to PostScript and non-PostScript devices.
- 23.06 Define data fields and publish contents of a database.
- 23.07 Submit files to and use: servers; spoolers; queues; and, software and hardware RIPs.

24.0 Demonstrate proficiency in making and using files in the portable document format -– The student will be able to:
- 24.01 Define the relationship between PostScript and PDF files.
- 24.02 Identify and define the attributes and advantages of a PDF file.
- 24.03 Identify and define the uses for the PDF file in the digital printing workflow.
- 24.04 Identify and define ways to distribute PDF files.
- 24.05 Make a PDF file from a PostScript file to meet given production specifications.
- 24.06 Edit, modify, and annotate a PDF file using appropriate software.
- 24.07 Use the PDF file format to make a multi-purposed document for both digital printing and for interactive media.
- 24.08 Make a searchable digital catalog of a collection of PDF files.
- 24.09 Define and apply security and job options to PDF files.
- 24.10 Organize and embed fonts in a PDF file.

25.0 Demonstrate proficiency in performing basic finishing and distribution competencies -- The student will be able to:
- 25.01 Read and comprehend production information on a job jacket/ticket.
- 25.02 Apply basic math skills to the binding and distribution operations.
- 25.03 Prepare folding dummy from press sheet in accordance with job ticket specifications and approved proof.
- 25.04 Setup and operate folder in accordance with job ticket specifications and folding dummy.

- 25.05 Apply basic principles of finishing and distribution following folded bound signature impositions to allow for lips, trims and bleeds according to saddle- and side-stitch binding method.
- 25.06 Define how to use and setup cutters.
- 25.07 Prepare rule-out of press sheet for finishing operations according to job ticket specifications and approved proof.
- 25.08 Setup and operate cutter in accordance with rule-out.
- 25.09 Square substrate.
- 25.10 Define and identify problems with substrate.
- 25.11 Define the proper maintenance procedures for paper cutters.
- 25.12 Define how to change the blade on a paper cutter.
- 25.13 Select and identify the most commonly used types of paper.
- 25.14 Demonstrate knowledge of paper types related to their printing, folding and binding characteristics.
- 25.15 Hand-jog 8 1/2" x 11" substrate.
- 25.16 Machine-jog substrate.
- 25.17 Define and identify off-line finishing systems.
- 25.18 Define the fundamentals of saddle stitching and perfect binding.
- 25.19 Identify the components of case, spiral, and perfect bound books.
- 25.20 Estimate the cost of materials and production for performing bindery operations; cutting, scoring, folding, packaging and coating.
- 25.21 Setup and operate stitcher (side and saddle).
- 25.22 List the techniques used to control waste production and disposal in a modern bindery.
- 25.23 Define and identify spiral, comb, and wire binding equipment and supplies.
- 25.24 Define tipping procedures.
- 25.25 Perform preventive maintenance on binding and finishing equipment.
- 25.26 Demonstrate methods of counting substrate (machine, measurement, weight and rapid multiple-sheet manual counting by fives).
- 25.27 Define collating flat sheets.
- 25.28 Setup and operate a paper drill for standard loose-leaf binder.
- 25.29 Define and identify packaging and shrink-wrapping equipment.
- 25.30 Demonstrate how to package and identify completed job according to job specifications.

26.0 Demonstrate understanding of color principles as applied to the preparation, production, evaluation, and correction of color printing – The student will be able to:

- 26.01 Describe the concepts of color theory and color temperature.
- 26.02 Describe factors affecting the perception and recognition of color.
- 26.03 Identify and apply industry standard criteria to the evaluation of color in imaging and publishing.
- 26.04 Describe and identify the components and processes of color publishing systems.
- 26.05 Evaluate and color correct the quality of color publishing images.
- 26.06 Identify and describe models used to specify color.
- 26.07 Describe and identify color output devices of digital imaging systems.
- 26.08 Evaluate the quality of digital imaging color output devices.
- 26.09 Identify and describe the purposes of a Color Management System.

27.0 Demonstrate the ability to maintain and troubleshoot normal operating problems on a digital printing system – The student will be able to:

27.01 Perform the preventive maintenance procedures for cleaning sensors, camming motor, and binder.
27.02 Adjust paper path to handle various papers.
27.03 Determine source of machine-based print problems and to apply corrections strategies for which training has been given.
27.04 Determine when to appropriately contact vendor technical support.

28.0 Use information technology tools--The students will be able to:
28.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
28.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
28.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
28.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

29.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
29.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
29.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
29.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
29.04 Employ mentoring skills to inspire and teach others. LT 5.0

30.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
30.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
30.02 Describe the effect of money management on personal and career goals. FL 3.0
30.03 Develop a personal budget and financial goals. FL3.1
30.04 Complete financial instruments for making deposits and withdrawals. FL3.2
30.05 Maintain financial records. FL3.3
30.06 Read and reconcile financial statements. FL3.4
30.07 Research, compare and contrast investment opportunities.

31.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
31.01 Describe the nature and types of business organizations. SY 1.0
31.02 Explain the effect of key organizational systems on performance and quality.
31.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
31.04 Explain the impact of the global economy on business organizations. HE 2.0

32.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
32.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
32.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
32.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

32.04 Interpret and explain written organizational policies and procedures. ELR 2.0

33.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

33.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
33.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
33.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
33.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
33.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
33.06 Identify and exhibit traits for retaining employment. ECD 7.0
33.07 Identify opportunities and research requirements for career advancement. ECD 8.0
33.08 Research the benefits of ongoing professional development. ECD 9.0
33.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Commercial Art Technology 1**
Program Type: **Career Preparatory**
Career Cluster: **Art, A/V Technology and Communication**

	PSAV
Program Number	K600100
CIP Number	0648020304
Grade Level	30, 31
Standard Length	900 Hours
Teacher Certification	COMM ART @7 G
CTSO	SkillsUSA
SOC Codes (all applicable)	27-1029 43-9031
Facility Code	203 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Art, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Art, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as artists and related workers, illustrators, commercial designers (SOC 27-1024).

The course content will include the following: basic art skills; lettering skills; preparation of layouts and illustrations; preparation of camera ready paste-up; and development of specialized skills.

The course content should also include training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Commercial Art industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of two Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	GRA0036	Desktop Publishing Assistant	450 Hours	43-9031
B	GRA0037	Design Technician	450 Hours	27-1029

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate basic commercial art knowledge.
02.0 Demonstrate mathematics knowledge and skills.
03.0 Demonstrate proficiency in graphic production.
04.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
05.0 Demonstrate language arts knowledge and skills.
06.0 Solve problems using critical thinking skills, creativity and innovation.
07.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
08.0 Use information technology tools.
09.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
10.0 Demonstrate personal money-management concepts, procedures, and strategies
11.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
12.0 Describe the importance of professional ethics and legal responsibilities.
13.0 Demonstrate Science knowledge and skills.
14.0 Demonstrate proficiency in graphic art computer skills.
15.0 Explain the importance of employability and entrepreneurship skills.
16.0 Demonstrate proficiency in design skills.
17.0 Demonstrate an understanding of typography.
18.0 Demonstrate proficiency in layout and paste-up.
19.0 Demonstrate proficiency in applied design.
20.0 Demonstrate proficiency in graphic art computer skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Commercial Art Technology 1**
PSAV Number: **K600100**

Course Number: GRA0036
Occupational Completion Point: A - CORE
Desktop Publishing Assistant – 450 Hours – SOC Code 43-9031

01.0 Demonstrate basic commercial art knowledge -- The student will be able to:
- 01.01 Take notes, listen and comply with instructions.
- 01.02 Read instructions thoroughly.
- 01.03 Request clarification of instructions (ask questions).
- 01.04 Relay instructions to others orally and in writing.
- 01.05 Define and explain commercial art terms.
- 01.06 Document job tasks, costs and maintain records.
- 01.07 Make project presentations.
- 01.08 Interact with the employer, fellow employees and customers.

02.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 02.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 02.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 02.03 Construct charts/tables/graphs using functions and data. AF3.5
- 02.04 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
- 02.05 Measure tolerance(s) on horizontal and vertical surfaces using millimeters, centimeters, feet and inches.
- 02.06 Add, subtract, multiply and divide using fractions, decimals, and whole numbers.
- 02.07 Determine the correct purchase price, to include sales tax for a materials list containing a minimum of six items.
- 02.08 Demonstrate an understanding of federal, state and local taxes and their computation.

03.0 Demonstrate proficiency in graphic production -- The student will be able to:
- 03.01 Define the differences in production processes and estimate relative costs.
- 03.02 Recognize limitations for printing.
- 03.03 Identify and select different printing surfaces.
- 03.04 Identify and select appropriate printing inks.
- 03.05 Identify and select finishing processes.
- 03.06 Identify standard industry material sizes.
- 03.07 Specify types of folds.

04.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 04.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 04.02 Locate, organize and reference written information from various sources. CM 3.0

04.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
04.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
04.05 Apply active listening skills to obtain and clarify information. CM 7.0
04.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
04.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

05.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
05.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
05.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
05.03 Present information formally and informally for specific purposes and audiences. AF2.9

06.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
06.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
06.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
06.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
06.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

07.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
07.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
07.02 Explain emergency procedures to follow in response to workplace accidents.
07.03 Create a disaster and/or emergency response plan.

08.0 Use information technology tools--The students will be able to:
08.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
08.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
08.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
08.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

09.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
09.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
09.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
09.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
09.04 Employ mentoring skills to inspire and teach others. LT 5.0

10.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

10.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
10.02 Describe the effect of money management on personal and career goals. FL 3.0
10.03 Develop a personal budget and financial goals. FL3.1
10.04 Complete financial instruments for making deposits and withdrawals. FL3.2
10.05 Maintain financial records. FL3.3
10.06 Read and reconcile financial statements. FL3.4
10.07 Research, compare and contrast investment opportunities.

11.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

11.01 Describe the nature and types of business organizations. SY 1.0
11.02 Explain the effect of key organizational systems on performance and quality.
11.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
11.04 Explain the impact of the global economy on business organizations. HE 2.0

12.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

12.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
12.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
12.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
12.04 Interpret and explain written organizational policies and procedures. ELR 2.0

13.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0

13.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
13.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings.AF4.3
13.03 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.
13.04 Draw conclusions or make inferences from data.
13.05 Identify health-related problems, which may result from exposure to work related chemicals and hazardous materials, and know the proper precautions required for handling such materials.
13.06 Understand pressure measurement in terms of PSI, inches of mercury, and KPA.

14.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:

14.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
14.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
14.03 Produce finished computer projects reflecting current computer graphic art technology.
14.04 Operate various scanners and input devices for computer graphics.

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
15.06 Identify and exhibit traits for retaining employment. ECD 7.0
15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
15.08 Research the benefits of ongoing professional development. ECD 9.0
15.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0:
15.10 Conduct a job search.
15.11 Secure information about a job.
15.12 Identify documents, which may be required when applying for a job.
15.13 Complete a job application form correctly.
15.14 Demonstrate competence in job interview techniques.
15.15 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other employees.
15.16 Identify and adopt acceptable work habits.
15.17 Demonstrate knowledge of how to make job changes appropriately.
15.18 Demonstrate acceptable employee health habits.
15.19 Demonstrate knowledge of the "Right-To-Know Law".

Course Number: GRA0037
Occupational Completion Point: B
Design Technician – 450 Hours – SOC Code 27-1029

16.0 Demonstrate proficiency in design skills -- The student will be able to:

16.01 Explain proper use and care of tools.
16.02 Apply principles and elements of design.
16.03 Apply color theory (pigment versus light).
16.04 Utilize tones, hues and values.
16.05 Sketch designs using pencil and ink.
16.06 Paint freehand or within sketched designs using mixed colors or apply colors to produce desired shades.
16.07 Apply color for impact (color psychology).
16.08 Differentiate between line halftone, duotone and four-color process.
16.09 Demonstrate balance in design.
16.10 Demonstrate designs with symmetry and asymmetry.
16.11 Develop grids for layouts of magazine pages, ads, etc.
16.12 Paint decorative freehand designs and objects.
16.13 Use palette knife or brush to mix colors.
16.14 Create designs by stripping.
16.15 Demonstrate harmony and contrast of line and shape.
16.16 Demonstrate harmony and contrast of color and tone.
16.17 Demonstrate harmony and contrast of proportion.
16.18 Demonstrate harmony and contrast of texture pattern.
16.19 Demonstrate harmony and contrast of motion.
16.20 Indicate style appropriate to desired impact.
16.21 Make a collage.

17.0 Demonstrate an understanding of typography -- The student will be able to:

17.01 Explain proper use, care and cleaning of equipment.
17.02 Identify and select typography materials.
17.03 Define typographic terms, including leading and kerning.
17.04 Identify and select typographic methods.
17.05 Demonstrate the ability to proofread and use proofreaders' marks.
17.06 Explain picas, points and conversion to inches.
17.07 Explain specification of type and copy fitting.
17.08 Identify and select typographic styles.
17.09 Define basic letter structures.
17.10 Demonstrate mixing of families of type.

18.0 Demonstrate proficiency in layout and paste-up -- The student will be able to:
18.01 Explain proper use and care of tools.
18.02 Identify parts of a layout.
18.03 Utilize amberlith, rubylith, screens, overlays and register marks.
18.04 Make thumbnail sketch pencil layouts.
18.05 Prepare comprehensives from pencil layouts.
18.06 Prepare camera-ready mechanicals from comprehensives.
18.07 Prepare specific forms of instruction on mechanicals for presentations and for a printer.
18.08 Crop and scale artwork ardor photos for layouts.
18.09 Demonstrate enlarging or reducing with a grid, proportion wheel and other methods.
18.10 Make a color separation with overlays.
18.11 Demonstrate various ruling techniques.
18.12 Demonstrate the uses of different adhesives.
18.13 Specify the use of halftones or special effects.
18.14 Explain layout and color trends.

19.0 Demonstrate proficiency in applied design -- The student will be able to:
19.01 Locate and identify resource materials and develop a morgue.
19.02 Design logos.
19.03 Design stationery layouts.
19.04 Design a magazine/book cover or record jacket.
19.05 Design an ad campaign that includes newspapers, magazines and billboards.
19.06 Design a greeting card.
19.07 Design a business card.
19.08 Apply advertising psychology.
19.09 Produce an industrial brochure.
19.10 Design a consumer brochure.
19.11 Construct a package design.
19.12 Produce TV story boards.
19.13 Develop a square and half-drop repeat design.
19.14 Produce computer-assisted artwork. (Optional)

20.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
20.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
20.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.

20.03 Produce finished computer projects reflecting current computer graphic art technology.
20.04 Operate various scanners and input devices for computer graphics.

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Commercial Art Technology 2**
Program Type: **Career Preparatory**
Career Cluster: **Art, A/V Technology and Communication**

	PSAV
Program Number	K600200
CIP Number	0648020305
Grade Level	30, 31
Standard Length	600 Hours
Teacher Certification	COMM ART @7 G
CTSO	SkillsUSA
SOC Codes (all applicable)	27-1024
Facility Code	203 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Art, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Art, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as artists and related workers, illustrators, commercial designers (SOC 27-1024).

The course content will include the following: basic art skills; lettering skills; preparation of layouts and illustrations; preparation of camera ready paste-up; and development of specialized skills.

The course content should also include training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Commercial Art industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of one Program, two Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	GRA0038	Illustrator	300 Hours	27-1024
B	GRA0039	Print Media Artist	300 Hours	27-1024

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Demonstrate proficiency in technical art skills.
02.0 Demonstrate proficiency in illustration skills.
03.0 Demonstrate proficiency in graphic art computer skills.
04.0 Demonstrate proficiency in airbrush skills.
05.0 Demonstrate proficiency in lettering skills.
06.0 Demonstrate mathematics knowledge and skills.
07.0 Demonstrate science knowledge and skills.
08.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
09.0 Demonstrate language arts knowledge and skills.
10.0 Solve problems using critical thinking skills, creativity and innovation.
11.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
12.0 Use information technology tools.
13.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
14.0 Demonstrate personal money-management concepts, procedures, and strategies.
15.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
16.0 Describe the importance of professional ethics and legal responsibilities.
17.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Commercial Art Technology 2**
PSAV Number: **K600200**

Course Number: GRA0038
Occupational Completion Point: A
Illustrator – 300 Hours – SOC Code 27-1024

01.0 Demonstrate proficiency in technical art skills -- The student will be able to:
  01.01 Explain care and respect for all tools and equipment.
  01.02 Make computations for centering, spacing and scaling drawings.
  01.03 Draw on various types of drafting media.
  01.04 Interpret information from drawings, prints and sketches.
  01.05 Draw freehand sketches.
  01.06 Draw auxiliary views.
  01.07 Draw a one and two point perspective.
  01.08 Make corrections on a drawing.
  01.09 Draw in ink on a variety of surfaces.
  01.10 Develop a glossary of technical terms.
  01.11 Analyze an object to determine size and shape.
  01.12 Draw an oblique drawing.
  01.13 Draw an isometric drawing.
  01.14 Read and interpret technical charts, graphs and diagrams.
  01.15 Evaluate a drawing.
  01.16 Make an orthographic drawing using a Computer-Assisted Drafting (CAD) system as an individual or team member.
  01.17 Make a print on a plotter.

02.0 Demonstrate proficiency in illustration skills -- The student will be able to:
  02.01 Explain proper use and care of tools.
  02.02 Demonstrate elementary anatomy drawing skills.
  02.03 Illustrate using ink, pencil, washes, markers, tempera, watercolor and paints.
  02.04 Demonstrate renderings of different textures using the above media.
  02.05 Make illustrations using various subjects.
  02.06 Make a montage illustration.
  02.07 Draw a cartoon.

03.0 Demonstrate proficiency in graphic art computer skills -- The student will be able to:
  03.01 Demonstrate graphic art computer skills using appropriate graphic art programs and hardware.
  03.02 Use software and hardware to manipulate and adjust various drawings, pictures and graphic material by computer.
  03.03 Produce finished computer projects reflecting current computer graphic art technology.
  03.04 Operate various scanners and input devices for computer graphics.

04.0 Demonstrate proficiency in airbrush skills--The student will be able to:
  04.01 Explain proper use and care of tools.

04.02 Identify airbrush parts.
04.03 Perform airbrush exercises: dots, lines and graded shadings.
04.04 Select appropriate surfaces and painting materials.
04.05 Define the use of masking materials.
04.06 Airbrush a painting using masks or brushes.
04.07 Airbrush geometric shapes.
04.08 Airbrush freehand painting.
04.09 Airbrush an illustration of a product.
04.10 Retouch photos.

Course Number: GRA0039
Occupational Completion Point: B
Print Media Artist – 300 Hours – SOC Code 27-1024

01.0 Demonstrate proficiency in technical art skills -- The student will be able to:
01.01 Explain care and respect for all tools and equipment.
01.02 Make computations for centering, spacing and scaling drawings.
01.03 Draw on various types of drafting media.
01.04 Interpret information from drawings, prints and sketches.
01.05 Draw freehand sketches.
01.06 Draw auxiliary views.
01.07 Draw a one and two point perspective.
01.08 Make corrections on a drawing.
01.09 Draw in ink on a variety of surfaces.
01.10 Develop a glossary of technical terms.

05.0 Demonstrate proficiency in lettering skills -- The student will be able to:
05.01 Demonstrate use and care of tools, lettering pens, T-squares and triangles.
05.02 Identify and select lettering styles.
05.03 Perform and use pen, brush, pencil and LeRoy lettering.
05.04 Utilize guidelines, margins and spacing for layouts.
05.05 Paint or draw precise lettering for reproduction.
05.06 Utilize various types of prepared lettering processes.
05.07 Produce a sign on poster board.
05.08 Determine and select lettering styles for layout sketches.
05.09 Illuminate a certificate.

06.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
06.01 Demonstrate knowledge of arithmetic operations. AF3.2
06.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
06.03 Construct charts/tables/graphs using functions and data. AF3.5

07.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
07.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
07.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

08.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:

08.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
08.02 Locate, organize and reference written information from various sources. CM 3.0
08.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
08.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
08.05 Apply active listening skills to obtain and clarify information. CM 7.0
08.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
08.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

09.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
09.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
09.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
09.03 Present information formally and informally for specific purposes and audiences. AF2.9

10.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
10.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
10.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
10.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
10.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

11.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
11.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
11.02 Explain emergency procedures to follow in response to workplace accidents.
11.03 Create a disaster and/or emergency response plan.

12.0 Use information technology tools--The students will be able to:
12.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
12.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
12.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
12.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

13.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
13.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
13.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
13.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
13.04 Employ mentoring skills to inspire and teach others. LT 5.0

14.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

- 14.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 14.02 Describe the effect of money management on personal and career goals. FL 3.0
- 14.03 Develop a personal budget and financial goals. FL3.1
- 14.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 14.05 Maintain financial records. FL3.3
- 14.06 Read and reconcile financial statements. FL3.4
- 14.07 Research, compare and contrast investment opportunities.

15.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

- 15.01 Describe the nature and types of business organizations. SY 1.0
- 15.02 Explain the effect of key organizational systems on performance and quality.
- 15.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
- 15.04 Explain the impact of the global economy on business organizations. HE 2.0

16.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

- 16.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
- 16.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
- 16.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
- 16.04 Interpret and explain written organizational policies and procedures. ELR 2.0

17.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

- 17.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
- 17.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
- 17.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
- 17.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
- 17.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
- 17.06 Identify and exhibit traits for retaining employment. ECD 7.0
- 17.07 Identify opportunities and research requirements for career advancement. ECD 8.0
- 17.08 Research the benefits of ongoing professional development. ECD 9.0
- 17.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Commercial Photography Technology 1**
Program Type: **Career Preparatory**
Career Cluster: **Art, A/V Technology and Communication**

	PSAV
Program Number	K610100
CIP Number	0648020405
Grade Level	30, 31
Standard Length	700 Hours
Teacher Certification	PHOTOG @7 G
CTSO	SkillsUSA
SOC Codes (all applicable)	51-9131 51-9132
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, and the use of cameras and laboratory film-processing techniques in portrait, commercial and industrial applications with emphasis on composition and color dynamics, contact printing, enlarging and developing film, and use, care, and maintenance of photographic equipment.

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Art, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Art, A/V Technology and Communication career cluster.

Program Structure

This program is a planned sequence of instruction consisting of two occupational completion points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	PGY0180 PGY0181	Photographic Imaging Specialist (1) Photographic Imaging Specialist (2)	250 Hours 250 Hours	51-9131 51-9131
B	PGY0182	Photography Specialist/Lab Technician	200 Hours	51-9132

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE

Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9.0, Language 9.0, and Reading 9.0. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on statewide articulation agreements which correlate to programs and industry certifications, refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:
01.0 Perform laboratory skills.
02.0 Manage a photographic business.
03.0 Demonstrate mathematics knowledge and skills.
04.0 Demonstrate science knowledge and skills.
05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
06.0 Demonstrate language arts knowledge and skills.
07.0 Solve problems using critical thinking skills, creativity and innovation.
08.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
09.0 Control exposures (35mm camera).
10.0 Take basic photographs (35mm camera).
11.0 Finish photographs.
12.0 Apply lighting techniques.
13.0 Reproduce photographic media.
14.0 Demonstrate appropriate communication skills.
15.0 Explain the importance of employability and entrepreneurship skills.
16.0 Reproduce photographic media.
17.0 Operate various format cameras.
18.0 Process color images.
19.0 Procure color photographs.
20.0 Use information technology tools.
21.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
22.0 Demonstrate personal money-management concepts, procedures, and strategies
23.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
24.0 Describe the importance of professional ethics and legal responsibilities

Program Title: Commercial Photography Technology 1
PSAV Number: K610100

Course Number: PGY0180
Occupational Completion Point: A
Photographic Imaging Specialist (1 of 2) – 250 Hours – SOC Code 51-9131

01.0 Perform laboratory skills -- The student will be able to:
- 01.01 Mix developers and other chemicals.
- 01.02 Hand-process black and white film.
- 01.03 Print black and white photographs.
- 01.04 Process black and white paper.

02.0 Manage the photographic business -- The student will be able to:
- 02.01 Apply communication skills.
- 02.02 Apply human relation skills.
- 02.03 Set rates for photographic work.
- 02.04 Maintain shop records and files.
- 02.05 Develop effective advertising.
- 02.06 Maintain presentational portfolio

03.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
- 03.01 Demonstrate knowledge of arithmetic operations. AF3.2
- 03.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
- 03.03 Construct charts/tables/graphs using functions and data. AF3.5

04.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
- 04.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
- 04.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

05.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
- 05.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
- 05.02 Locate, organize and reference written information from various sources. CM 3.0
- 05.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
- 05.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
- 05.05 Apply active listening skills to obtain and clarify information. CM 7.0
- 05.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
- 05.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

06.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 06.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 06.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 06.03 Present information formally and informally for specific purposes and audiences. AF2.9

07.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
- 07.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
- 07.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
- 07.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
- 07.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

08.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
- 08.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
- 08.02 Explain emergency procedures to follow in response to workplace accidents.
- 08.03 Create a disaster and/or emergency response plan.

Course Number: PGY0181
Occupational Completion Point: A
Photographic Imaging Specialist (2 of 2) – 250 Hours – SOC Code 51-9131

09.0 Control exposures (35mm camera) -- The student will be able to:
- 09.01 Set appropriate f-stop and shutter speeds.
- 09.02 Select appropriate film type.

10.0 Take basic photographs (35mm camera) -- The student will be able to:
- 10.01 Apply camera care and maintenance principles.
- 10.02 Compose photographs.
- 10.03 Take still photographs.
- 10.04 Take action photographs.

11.0 Finish photographs -- The student will be able to:
- 11.01 Mount photographs.
- 11.02 Mat/frame photographs.

12.0 Apply lighting techniques -- The student will be able to:
- 12.01 Take photographs with available light.
- 12.02 Take photographs with electronic strobe.
- 12.03 Take photographs with photo-flood lighting.

13.0 Reproduce photographic media -- The student will be able to:
- 13.01 Copy prints.

14.0 Demonstrate appropriate communication skills -- The student will be able to:
- 14.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
- 14.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
- 14.03 Read and follow written and oral instructions.
- 14.04 Answer and ask questions coherently and concisely.

14.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
14.06 Demonstrate appropriate telephone/communication skills.

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
15.06 Identify and exhibit traits for retaining employment. ECD 7.0
15.07 Identify opportunities and research requirements for career advancement. ECD 8.0
15.08 Research the benefits of ongoing professional development. ECD 9.0
15.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Course Number: PGY0182
Occupational Completion Point: B
Photography Specialist/Lab Technician – 200 Hours – SOC Code 51-9131

16.0 Reproduce photographic media -- The student will be able to:
16.01 Scan Transparencies
16.02 Scan internegatives

17.0 Operate various format cameras -- The student will be able to:
17.01 Use view cameras.

18.0 Process color images -- The student will be able to:
18.01 Hand process color negatives and transparencies. (optional)
18.02 Process color negatives and transparencies. (optional)
18.03 Down load images to a computer.
18.04 Save images in a computer to a storage device.

19.0 Procure color photographs -- The student will be able to:
19.01 Process color paper. (optional)
19.02 Print color negatives. (optional)
19.03 Print color negatives using color analyzer. (optional)
19.04 Purchase color mediums.
19.05 Calibrate a computer monitor.
19.06 Analyze a color print for correct color and contrast.

20.0 Use information technology tools--The students will be able to:
20.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
20.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
20.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
20.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

21.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

21.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0

21.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0

21.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0

21.04 Employ mentoring skills to inspire and teach others. LT 5.0

22.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

22.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0

22.02 Describe the effect of money management on personal and career goals. FL 3.0

22.03 Develop a personal budget and financial goals. FL3.1

22.04 Complete financial instruments for making deposits and withdrawals. FL3.2

22.05 Maintain financial records. FL3.3

22.06 Read and reconcile financial statements. FL3.4

22.07 Research, compare and contrast investment opportunities.

23.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

23.01 Describe the nature and types of business organizations. SY 1.0

23.02 Explain the effect of key organizational systems on performance and quality.

23.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0

23.04 Explain the impact of the global economy on business organizations. HE 2.0

24.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

24.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0

24.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1

24.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2

24.04 Interpret and explain written organizational policies and procedures. ELR 2.0

15.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:

15.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0

15.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0

15.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0

15.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0

15.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0

15.06 Identify and exhibit traits for retaining employment. ECD 7.0

15.07 Identify opportunities and research requirements for career advancement. ECD 8.0

15.08 Research the benefits of ongoing professional development. ECD 9.0

15.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

Revised: 3/11/2011

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Commercial Photography Technology 2**
Program Type: **Career Preparatory**
Career Cluster: **Art, A/V Technology and Communication**

	PSAV
Program Number	K610200
CIP Number	0648020406
Grade Level	30, 31
Standard Length	950 Hours
Teacher Certification	PHOTOG @7 G
CTSO	SkillsUSA
SOC Codes (all applicable)	27-4021
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Art, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Art, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment as photographers', commercial photographers (SOC 27-4021).

The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, safe and efficient work practices, and the use of cameras and laboratory film-processing techniques in portrait, commercial and industrial applications with emphasis on composition and color dynamics, contact printing, enlarging and developing film, and use, care, and maintenance of photographic equipment.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Commercial Photography industry; planning, management, finance, technical and product skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of two Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	PGY0183 PGY0184	Portrait Photographer 1 Portrait Photographer 2	250 Hours 250 Hours	27-4021 27-4021
B	PGY0185	Commercial Photographer	450 Hours	27-4021

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

SkillsUSA, Inc. is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Operate various format cameras.
02.0 Take studio photographs.
03.0 Use digital imaging.
04.0 Produce media presentations.
05.0 Demonstrate an understanding of entrepreneurship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: Commercial Photography Technology 2
PSAV Number: K610200

Course Number: PGY0183
Occupational Completion Point: A
Portrait Photographer 1 – 250 Hours – SOC Code 27-4021

01.0 Operate various format cameras -- The student will be able to:
  01.01 Use 2¼ format cameras.

02.0 Take studio photographs -- The student will be able to:
  02.01 Take portraits.

03.0 Use digital imaging -- The student will be able to:
  03.01 Use basic photographic computer skills
  03.02 Use a professional imagining program.
  03.03 Use a flatbed and film scanner.
  03.04 Output photographic quality images using a digital printer.
  03.05 Use digital camera.

Course Number: PGY0184
Occupational Completion Point: A (Cont.)
Portrait Photographer 2– 250 Hours – SOC Code 27-4021

01.0 Operate various format cameras -- The student will be able to:
  01.01 Use 2¼ format cameras.

02.0 Take studio photographs -- The student will be able to:
  02.01 Take portraits.

03.0 Use digital imaging -- The student will be able to:
  03.01 Use basic photographic computer skills
  03.02 Use a professional imagining program.
  03.03 Use a flatbed and film scanner.
  03.04 Output photographic quality images using a digital printer.
  03.05 Use digital camera.

Course Number: PGY0185
Occupational Completion Point: B
Commercial Photographer – 450 Hours – SOC Code 27-4021

04.0 Take studio photographs -- The student will be able to:
  04.01 Take commercial photographs.

05.0 Produce media presentations -- The student will be able to:
  05.01 Prepare script for slide presentation.
  05.02 Shoot slides for slide presentation.

05.03 Produce slide presentation.
05.04 Prepare script for video presentation.
05.05 Shoot video tape.
05.06 Produce video presentation.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Design 1**
Program Type: **Career Preparatory**
Career Cluster: **Art, A/V Technology and Communication**

	PSAV
Program Number	K700100
CIP Number	0507080107
Grade Level	30, 31
Standard Length	600 Hours
Teacher Certification	BUS ED 1 @2 VOE @ 7 TEACH CBE @ 7 BUS DP @ 7 G ELECT DP @ 7 G CLERICAL @ 7 G SECRETAR @ 7 G STENOG @ 4 @ 7 G TEC ELEC @ 7 G $ 7 G COMP SCI @6 @2 COMM ART @7
CTSO	Phi Beta Lambda BPA
SOC Codes (all applicable)	15-1041 43-9031
Facility Code	245 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Art, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Art, A/V Technology and Communication career cluster.

This program is designed to prepare students for employment as a Information Technology Assistant, Production Assistant, Digital Assistant Designer, Graphic Designer, and Multi-Media Designer.

This program offers a broad foundation of knowledge and skills to prepare students for employment in digital publishing positions. The content includes enhanced practical experiences in computer generated art and text, graphic design, graphic production, electronic design skills, preparation of electronic layouts and illustrations, and electronic scanning; and development of specialized skills in multimedia presentations.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the digital publishing industry: planning; management; finance; technical and production skills; underlying principles of technology and design.

Instructional strategies for this program must include methods that require students to acquire; 1. Digital-Age Literacy - basic scientific, mathematical, and technological literacies - visual and information literacies - cultural literacy and global awareness; 2. Inventive Thinking - adaptability/ability to manage complexity - curiosity, creativity, and risk taking - higher order thinking and sound reasoning; 3. Effective Communication - teaming, collaboration, and interpersonal skills - personal and social responsibility - interactive communication; 4. High Productivity - ability to prioritize, plan, and manage for results - effective use of real-world tools - relevant, high-quality products.

Program Structure

This program is a planned sequence of instruction consisting of three Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	OTA0040	Information Technology Assistant	150 Hours	15-1041
B	GRA0024	Production Assistant	150 Hours	43-9031
C	GRA0025	Digital Assistant Designer	300 Hours	43-9031

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

Phi Beta Lambda (Postsecondary), and Business Professionals of America is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

Computing for College and Careers Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance.
02.0 Demonstrate comprehension and communication skills.
03.0 Use technology to enhance the effectiveness of communication skills.
04.0 Develop an awareness of management functions and organizational structures as they relate to today’s workplace and employer/ employee roles.
05.0 Practice quality performance in the learning environment and the workplace.
06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance.
08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals.
09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals.
10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace.
11.0 Perform functions and responsibilities to accomplish job objectives and enhance workplace performance.
12.0 Perform e-mail activities.
13.0 Demonstrate operating systems.
14.0 Develop an awareness of emerging technologies.

OR

Introduction to Information Technology Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance.
02.0 Demonstrate comprehension and communication skills.
03.0 Use technology to enhance the effectiveness of communication skills.
04.0 Develop an awareness of management functions and organizational structures as they relate to today’s workplace and employer/employee roles.
05.0 Practice quality performance in the learning environment and the workplace.
06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance.
07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance.
08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals.
09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals.
10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace.
12.0 Perform e-mail activities.
14.0 Develop an awareness of emerging technologies.
15.0 Participate in work-based learning experiences.

16.0 Demonstrate knowledge of different operating systems.
17.0 Demonstrate proficiency navigating the internet, intranet, and the WWW.
18.0 Demonstrate proficiency using HTML commands.
19.0 Demonstrate proficiency in page design applicable to the WWW:
20.0 Demonstrate proficiency using specialized web design software.
21.0 Develop an awareness of the information technology industry.
22.0 Develop an awareness of microprocessors and digital computers.
23.0 Develop an awareness of programming languages.
24.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model.
25.0 Demonstrate proficiency using common software applications.
26.0 Demonstrate proficiency using specialized software applications.
27.0 Demonstrate proficiency in computer skills.
28.0 Demonstrate knowledge of digital publishing concepts.
29.0 Perform decision-making activities.
30.0 Perform layout, design, and measurement activities.
31.0 Demonstrate proficiency in digital publishing operations.
32.0 Demonstrate proficiency in digital imaging.
33.0 Demonstrate proficiency in multimedia presentation.
34.0 Demonstrate mathematics knowledge and skills.
35.0 Demonstrate science knowledge and skills.
36.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
37.0 Demonstrate language arts knowledge and skills.
38.0 Solve problems using critical thinking skills, creativity and innovation.
39.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
40.0 Use information technology tools.
41.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
42.0 Demonstrate personal money-management concepts, procedures, and strategies.
43.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
44.0 Describe the importance of professional ethics and legal responsibilities.
45.0 Explain the importance of employability and entrepreneurship skills.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Design 1**
PSAV Number: **K700100**

Course Number: OTA0040
Occupational Completion Point: A
Information Technology Assistant – 150 hours – SOC Code 15-1041

Computing for College and Careers Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance -- the student will be able to:
  01.01 Develop keyboarding skills to enter and manipulate text and data.
  01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
  01.03 Identify and describe communications and networking systems used in workplace environments.
  01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
  01.05 Demonstrate basic computer file management skills.
  01.06 Troubleshoot problems with computer hardware peripherals and other office equipment.
  01.07 Describe ethical issues and problems associated with computers and information systems.
  01.08 Apply ergonomic principles applicable to the configuration of computer workstations.

02.0 Demonstrate comprehension and communication skills -- the student will be able to:
  02.01 Read and comprehend technical and non-technical reading assignments related to course content including trade journals, books, magazines and electronic sources.
  02.02 Write clear and well-organized research papers, integrating a variety of information.
  02.03 Prepare and deliver an oral report with appropriate materials to the class
  02.04 Participate in large group discussions as a member and/or a leader.
  02.05 Take notes, organize, summarize, and paraphrase ideas and details.
  02.06 Accurately follow written and oral instructions.
  02.07 Interpret data on graphs, charts, diagrams, and tables commonly used in this industry/occupation.

03.0 Use technology to enhance the effectiveness of communication skills -- the student will be able to:
  03.01 Select and use word processing software and accompanying features to enhance written business communications.
  03.02 Use the writing process to create and edit business documents appropriate to the subject matter, purpose, and audience.
  03.03 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.

03.04 Use computer networks (e.g., internet, on-line databases, e-mail) to facilitate collaborative or individual learning and communication.
03.05 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today’s workplace and employer/employee roles -- the student will be able to:
04.01 Explore, design, implement, and evaluate organizational structures and cultures for managing project teams.
04.02 Explore and demonstrate an awareness of current trends in business and the employee’s role in maintaining productive business environments in today’s global workplace.
04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace -- the student will be able to:
05.01 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).
05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance -- the student will be able to:
06.01 Demonstrate an awareness of quality service and the personal and professional standards required to establish an effective service-based culture in the workplace, business, or learning environment.
06.02 Identify, analyze, and implement managerial skills necessary for maintaining a high quality work environment, goals, and strategic planning in business settings.
06.03 Follow accepted rules, regulations, policies, procedures, processes, and workplace safety.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance -- the student will be able to:
07.01 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- the student will be able to:
- 08.01 Assess, analyze, and reassess individual talents, aptitudes, interests, and personal characteristics as they relate to potential future careers in business environments.
- 08.02 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.
- 08.03 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- the student will be able to:
- 09.01 Analyze personal skills and aptitudes in comparison with various business related job and career options.
- 09.02 Use career resources to develop an information base that reflects local and global business related occupations and opportunities for continuing education and workplace experience.
- 09.03 Demonstrate job-seeking skills required for entry-level employment (e.g., resume, application, interview, follow-up).
- 09.04 Design and initiate a plan to facilitate growth and skill development related to anticipated job requirements and career expectations.
- 09.05 Refine and implement a plan to facilitate personal growth and skill development related to anticipated job requirements and career expectations.
- 09.06 Demonstrate an awareness of specific job requirements and career paths (e.g., requirements, characteristics needed) in business environments.
- 09.07 Demonstrate an awareness of the potential impact of local and global trends on career plans and life goals.
- 09.08 Build mentor relationships with local professionals in the industry.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace – the student will be able to:
- 10.01 Accept constructive criticism.
- 10.02 Apply appropriate strategies to manage and resolve conflicts in work situations.
- 10.03 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

11.0 Perform functions and responsibilities to accomplish job objectives and enhance workplace performance -- the student will be able to:
- 11.01 Demonstrate knowledge of ethical behavior in a business environment (e.g., confidentiality of information, employee right to know, hiring practices, plagiarism, copyright violations, sexual harassment, mission statement, code of ethics, etc.).

12.0 Perform e-mail activities – the student will be able to:
- 12.01 Describe e-mail capabilities and functions.
- 12.02 Use the internet to perform e-mail activities.

13.0 Demonstrate operating systems -- the student will be able to:
- 13.01 Identify operating system file naming conventions.

13.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
13.03 Demonstrate a working knowledge of standard file formats.
13.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, MAC, and UNIX/LINUX).

14.0 Develop an awareness of emerging technologies -- the student will be able to:
14.01 Compare and contrast various methods of evaluation for emerging technologies.
14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
14.03 Compare and contrast emerging technologies (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

Course Number: OTA0040
Occupational Completion Point: A
Information Technology Assistant – 150 hours – SOC Code 15-1041

Introduction to information technology Competencies:

01.0 Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance -- the student will be able to:
01.01 Develop keyboarding skills to enter and manipulate text and data.
01.02 Describe and use current and emerging computer technology and software to perform personal and business related tasks.
01.03 Identify and describe communications and networking systems used in workplace environments.
01.04 Use reference materials such as on-line help, vendor bulletin boards, tutorials, and manuals available for application software.
01.05 Troubleshoot problems with computer hardware peripherals and other office equipment.
01.06 Describe ethical issues and problems associated with computers and information systems.

02.0 Demonstrate comprehension and communication skills -- the student will be able to:
02.01 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers.
02.02 Organize ideas and communicate oral and written messages appropriate for information technology environments.
02.03 Collaborate with individuals and teams to complete tasks and solve information technology problems.
02.04 Identify, define, and discuss professional information technology terminology appropriate for internal and external communications in an information technology environment.
02.05 Apply the writing process to the creation of appropriate documents following designated business formats.
02.06 Demonstrate an awareness of project management concepts and tools (e.g., timelines, deadlines, resource allocation, time management, delegation of tasks, collaboration, etc.).

03.0 Use technology to enhance the effectiveness of communication skills -- the student will be able to:

03.01 Use database, spreadsheet, presentation software, scheduling, and integrated software packages to enhance communication.
03.02 Respond to and utilize information derived from multiple sources (e.g., written documents, instructions, e-mail, voice mail) to solve business problems and complete business tasks.

04.0 Develop an awareness of management functions and organizational structures as they relate to today's workplace and employer/employee roles -- the student will be able to:
04.01 Explore, design, implement, and evaluate organizational structures and cultures.
04.02 Explore and demonstrate an awareness of current trends in business and the employee's role in maintaining productive business environments in today's global workplace.
04.03 Collaborate with individuals and teams to complete tasks and solve business-related problems and demonstrate initiative, courtesy, loyalty, honesty, cooperation, and punctuality as a team member.

05.0 Practice quality performance in the learning environment and the workplace -- the student will be able to:
05.01 Assess personal, peer and group performance and identify and implement strategies for improvement (e.g., organizational skills, note taking/outlining, advance organizers, reasoning skills, problem-solving skills, and decision-making skills).
05.02 Develop criteria for assessing products and processes that incorporate effective business practices (e.g., time management, productivity, total quality management).

06.0 Incorporate appropriate leadership and supervision techniques, customer service strategies, and standards of personal ethics to accomplish job objectives and enhance workplace performance -- the student will be able to:
06.01 Demonstrate awareness of the following workplace essentials: quality customer service; business ethics; confidentiality of information; copyright violations; accepted workplace rules, regulations, policies, procedures, processes, and workplace safety, and appropriate attire and grooming.

07.0 Apply mathematical operations and processes as well as financial planning strategies to commonly occurring situations in the workplace to accomplish job objectives and enhance workplace performance -- the student will be able to:
07.01 Analyze, interpret, compile, and demonstrate the ability to present/communicate data in understandable and measurable terms using common statistical procedures.
07.02 Use common standards of measurement including the metric system in solving work-related or business problems (e.g., length, weight, currency, time).
07.03 Select and use the correct mathematical processes and tools to solve complex problem situations that are typical of business settings and use formulas when appropriate.

08.0 Assess personal strengths and weaknesses as they relate to job objectives, career exploration, personal development, and life goals -- the student will be able to:
08.01 Use personal assessment tools to identify personal strengths and weaknesses related to learning and work environments.

08.02 Analyze job and career requirements and relate career interests to opportunities in the global economy.

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- the student will be able to:

09.01 Research, compare, and contrast information technology career clusters (e.g., characteristics needed, skills required, education required, industry certifications, advantages and disadvantages of information technology careers, the need for information technology workers, etc.).
09.02 Describe the variety of occupations and professions within the world of information technology including those where information technology is either in a primary focus or in a supportive role.
09.03 Describe job requirements for the variety of occupations and professions within the global world of information technology.
09.04 Analyze personal skills and aptitudes in comparison with information technology career opportunities.
09.05 Refine and implement a plan to facilitate personal growth and skill development related to information technology career opportunities.
09.06 Develop and maintain an electronic career portfolio, to include, but not limited to the resume and letter of application.

10.0 Demonstrate human relations/interpersonal skills appropriate for the workplace -- the student will be able to:

10.01 Accept constructive criticism.
10.02 Demonstrate personal and interpersonal skills appropriate for the workplace (e.g., responsibility, dependability, punctuality, integrity, positive attitude, initiative, respect for self and others, professional dress, etc.).

12.0 Perform e-mail activities – the student will be able to:

12.01 Describe e-mail capabilities and functions.
12.02 Identify components of an e-mail message.
12.03 Identify the components of an e-mail address.
12.04 Identify when to use different e-mail options.
12.05 Attach a file to an e-mail message.
12.06 Forward an e-mail message.
12.07 Use an address book.
12.08 Reply to an e-mail message.
12.09 Use the internet to perform e-mail activities.
12.10 Identify the appropriate use of e-mail and demonstrate related e-mail etiquette.
12.11 Identify when to include information from an original e-mail message in a response.
12.12 Identify common problems associated with widespread use of e-mail.

14.0 Develop an awareness of emerging technologies -- the student will be able to:

14.01 Compare and contrast various methods of evaluation for emerging technologies.
14.02 Demonstrate knowledge of the process of planning upgrades and changeovers.
14.03 Compare and contrast emerging technologies and describe how they impact business in the global marketplace (e.g., wireless, wireless web, cell phones, portables/handhelds, smart appliances, home networks, peer-to-peer, etc.).

15.0 Participate in work-based learning experiences -- the student will be able to:
- 15.01 Participate in work-based learning experiences in an information technology environment.
- 15.02 Discuss the use of technology in an information technology environment.

16.0 Demonstrate knowledge of different operating systems – the student will be able to:
- 16.01 Identify operating system file naming conventions.
- 16.02 Demonstrate proficiency with file management and structure (e.g., folder creation, file creation, backup, copy, delete, open, save).
- 16.03 Demonstrate a working knowledge of standard file formats.
- 16.04 Explain the history and purpose of various operating systems (e.g., DOS, Windows, MAC, and UNIX/LINUX).

17.0 Demonstrate proficiency navigating the internet, intranet, and the WWW – the student will be able to:
- 17.01 Identify and describe web terminology.
- 17.02 Demonstrate proficiency in using the basic features of GUI browsers (e.g., setting bookmarks, basic configurations, e-mail configurations, address book).
- 17.03 Define Universal Resource Locators (URLS) and associated protocols (e.g., .com, .org, .edu, .gov, .net, .mil).
- 17.04 Describe and observe internet/intranet ethics and copyright laws and regulatory control.
- 17.05 Trace the evolution of the internet from its inception to the present and into the future.
- 17.06 Demonstrate proficiency using search engines (e.g., YAHOO!, GOOGLE, NORTHERN LIGHT, LYCOS, EXCITE, etc.).
- 17.07 Demonstrate proficiency using various web tools (e.g., downloading of files, transfer of files, telnet, PDF, etc.).
- 17.08 Identify effective boolean search strategies.

18.0 Demonstrate proficiency using HTML commands – the student will be able to:
- 18.01 Identify elements of a web page.
- 18.02 Describe individual web page layouts and content (e.g., writing for the web, web structure).
- 18.03 Define basic HTML terminology.
- 18.04 Analyze HTML source code developed by others.
- 18.05 Create web pages using basic HTML tags (e.g., links, lists, character styles, text alignment, tables).
- 18.06 Use storyboarding techniques for subsequent web pages (e.g., linear, hierarchical).
- 18.07 Edit and test html documents for accuracy and validity.
- 18.08 Use basic functions of WYSIWYG editors.
- 18.09 Use basic functions of HTML, DHTML, and XML editors and converters.
- 18.10 Enhance web pages through the addition of images and graphics including animation.

19.0 Demonstrate proficiency in page design applicable to the WWW -- the student will be able to:
- 19.01 Develop an awareness of acceptable web page design, including index pages in relation to the rest of the web site.

19.02 Describe and apply color theory as it applies to web page design (e.g., background and text color).
19.03 Access and digitize graphics through various resources (e.g., scanner, digital cameras, on-line graphics, clipart, CD ROM'S).
19.04 Use image design software to create and edit images.
19.05 Demonstrate proficiency in publishing to the internet.
19.06 Demonstrate proficiency in adding downloadable forms to web pages.
19.07 Explain the need for web-based applications.

20.0 Demonstrate proficiency using specialized web design software -- the student will be able to:
20.01 Compare and contrast various specialized web design software (e.g., flash, shockwave, GOLIVE, director, etc.).
20.02 Demonstrate proficiency using use of various specialized web design software (e.g., flash, shockwave, GOLIVE, director, etc.).

21.0 Develop an awareness of the information technology industry -- the student will be able to:
21.01 Explain how information technology impacts the operation and management of business and society.
21.02 Explain the emergence of e-commerce and e-government and the potential impact on business and society.
21.03 Explain the emergence of a paperless society.

22.0 Develop an awareness of microprocessors and digital computers -- the student will be able to:
22.01 Describe the evolution of the digital computer.
22.02 Explain the general architecture of a microcomputer system.
22.03 Explain the evolution of microprocessors.
22.04 Explain software hierarchy and its impact on microprocessors.
22.05 Explain the need for and use of peripherals.
22.06 Demonstrate proficiency using peripherals.
22.07 Identify the basic concepts of computer maintenance and upgrades.
22.08 Differentiate between diagnosing and troubleshooting.

23.0 Develop an awareness of programming languages -- the student will be able to:
23.01 Explain the history of programming languages.
23.02 Explain the need for and use of compilers.
23.03 Explain how compilers work.
23.04 Identify the three types of programming design approaches (e.g., top-down, structured and object-oriented).

24.0 Demonstrate an understanding of the seven layers of the Open Systems Interface (OSI) model -- the student will be able to:
24.01 Identify how types of networks and how they work.
24.02 Identify the role of servers and clients on a network.
24.03 Identify benefits and risks of networked computing.
24.04 Identify the relationship between computer networks and other communications networks (i.e. Telephone systems).
24.05 Identify intranets, extranets and how they relate to the internet.
24.06 Demonstrate basic understanding of network administration.

24.07 Describe the evolution of OSI from its inception to the present and into the future.
24.08 Explain the interrelations of the seven layers of the Open Systems Interface (OSI) as it relates to hardware and software.

25.0 Demonstrate proficiency using common software applications -- the student will be able to:
25.01 Compare and contrast the appropriate use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, java applet, music, etc.).
25.02 Demonstrate proficiency in the use of various software applications (e.g., word processing, desktop publishing, graphics design, web browser, e-mail, presentation, database, scheduling, financial management, java applet, music, etc.).

26.0 Demonstrate proficiency using specialized software applications -- the student will be able to:
26.01 Compare and contrast the appropriate use of specialized software applications (e.g., (OLTP, computer aided design, computer aided manufacturing, 3D animation process control, materials management, etc.).
26.02 Demonstrate awareness of specialized software applications (e.g., OLTP, computer aided design, computer aided manufacturing, 3D animation, process control, materials management, etc.)
26.03 Demonstrate the ability to incorporate digital sound.

Course Number: GRA0024
Occupational Completion Point: B
Production Assistant – 150 hours – SOC Code 43-9031

15.0 Participate in work-based learning experiences -- the student will be able to:
15.01 Discuss the use of technology in a digital publishing environment

27.0 Demonstrate proficiency in computer skills -- the student will be able to:
27.01 Identify all computer parts (e.g., RAM, ROM).
27.02 Demonstrate an understanding of all functions of a computer.
27.03 Utilize appropriate font management techniques (e.g., TrueType, postscript, install and remove fonts).
27.04 Perform storage management (e.g., hard drive, floppy disk).
27.05 Perform maintenance of computers and peripherals.

28.0 Demonstrate knowledge of digital publishing concepts -- the student will be able to:
28.01 Identify the skills needed by a digital designer.
28.02 Define commonly used terms in graphic communications.
28.03 Identify characteristics of paper.
28.04 Identify different kinds of color (e.g., spot, process).
28.05 Identify software used in digital publishing
28.06 Demonstrate knowledge of copyright laws.

29.0 Perform decision-making activities -- the student will be able to:
29.01 Determine work priorities.
29.02 Evaluate information to be used and choose relevant material.

29.03 Determine the audience.
29.04 Demonstrate an understanding of various advertising mediums.
29.05 Recognize and maintain ethical standards.

30.0 Perform layout, design, and measurement activities -- the student will be able to:
30.01 Identify characteristics of type, type families, type series, and type styles.
30.02 Paste up mechanical elements electronically.
30.03 Prepare rough layout designs.
30.04 Identify elements of design.

31.0 Demonstrate proficiency in digital publishing operations -- the student will be able to:
31.01 Complete projects using a variety of fonts, sizes, leading, and alignments.
31.02 Output projects using a variety of devices (e.g., printers, imagesetters).
31.03 Design with type using kerning, tracking, horizontal/vertical scale, baseline shift, etc.
31.04 Produce projects using tables.
31.05 Produce projects using white space.
31.06 Assemble multipage documents.
31.07 Create documents that use master pages.
31.08 Use a variety of styles to produce effective layouts
31.09 Produce a document using printer and reader spreads.
31.10 Use publishing software to create a pre-press profile.
31.11 Produce a variety of designs using layout/paste-up software.

32.0 Demonstrate proficiency in digital imaging -- the student will be able to:
32.01 Demonstrate proper use of a scanner/input devices/digital cameras.
32.02 Crop and scale photographs and line art electronically.
32.03 Demonstrate an understanding of formats and modes (e.g., EPS, TIFF, PICT, JPEG, ASCII, BINARY).
32.04 Demonstrate use of image editing software.
32.05 Proofread electronically and manually.

Course Number: GRAA0025
Occupational Completion Point: C
Digital Assistant Designer – 300 Hours – SOC Code 43-9031

09.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- the student will be able to:
09.01 Prepare a portfolio.
09.02 Present a portfolio to an audience.

15.0 Participate in work-based learning experiences -- the student will be able to:
15.01 Participate in work-based learning experiences in a digital publishing environment.
15.02 Compare and contrast the software applications used in a digital publishing environment.

27.0 Demonstrate proficiency in computer skills -- the student will be able to:
27.01 Understand computer management skills (e.g., install and remove software, folder management, shortcuts, etc.).

27.02 Perform storage management activities using a variety of devices (e.g., CD ROM, monitors, modems, zip drives, jazz drives).
27.03 Understand disk utilities and virus protection activities.
27.04 Understand how to update existing software to new versions.

29.0 Perform decision-making activities -- the student will be able to:
29.01 Determine project specifications.

31.0 Demonstrate proficiency in digital publishing operations -- the student will be able to:
31.01 Produce multiple color designs using different color techniques including process color and spot color
31.02 Prepare output files using pre-press preparations (e.g., color separation, font management, file management, use of postscript fonts, etc.)
31.03 Read work orders and prepare electronic files that meet all specifications.
31.04 Design a document using grids and formats.
31.05 Produce documents integrating elements of design.
31.06 Demonstrate proficiency in the use of a vector based illustration program.

32.0 Demonstrate proficiency in digital imaging -- the student will be able to:
32.01 Complete projects using proper resolution and screen values (e.g., PPI, LPI, DPI).
32.02 Produce electronically retouched photographs.
32.03 Produce projects using a digital camera.
32.04 Scan multiple documents.
32.05 Crop and scale photographs electronically using a scanner.
32.06 Apply the use of proper resolution and screen values (e.g., PPI, LPI, DPI in documents
32.07 Produce electronically retouched photographs using tones, hues, and values.
32.08 Apply special effects to image files.

33.0 Demonstrate proficiency in multimedia presentation -- the student will be able to:
33.01 Create PDF files.

34.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
34.01 Demonstrate knowledge of arithmetic operations. AF3.2
34.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
34.03 Construct charts/tables/graphs using functions and data. AF3.5

35.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
35.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
35.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

36.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
36.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
36.02 Locate, organize and reference written information from various sources. CM 3.0

36.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
36.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
36.05 Apply active listening skills to obtain and clarify information. CM 7.0
36.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
36.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

37.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
37.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
37.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
37.03 Present information formally and informally for specific purposes and audiences. AF2.9

38.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
38.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
38.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
38.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
38.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

39.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
39.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
39.02 Explain emergency procedures to follow in response to workplace accidents.
39.03 Create a disaster and/or emergency response plan.

40.0 Use information technology tools--The students will be able to:
40.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
40.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
40.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
40.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

41.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
41.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
41.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
41.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
41.04 Employ mentoring skills to inspire and teach others. LT 5.0

42.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

42.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
42.02 Describe the effect of money management on personal and career goals. FL 3.0
42.03 Develop a personal budget and financial goals. FL3.1
42.04 Complete financial instruments for making deposits and withdrawals. FL3.2
42.05 Maintain financial records. FL3.3
42.06 Read and reconcile financial statements. FL3.4
42.07 Research, compare and contrast investment opportunities.

43.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
43.01 Describe the nature and types of business organizations. SY 1.0
43.02 Explain the effect of key organizational systems on performance and quality.
43.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
43.04 Explain the impact of the global economy on business organizations. HE 2.0

44.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
44.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
44.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
44.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
44.04 Interpret and explain written organizational policies and procedures. ELR 2.0

45.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
45.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
45.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
45.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
45.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
45.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
45.06 Identify and exhibit traits for retaining employment. ECD 7.0
45.07 Identify opportunities and research requirements for career advancement. ECD 8.0
45.08 Research the benefits of ongoing professional development. ECD 9.0
45.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Digital Design 2**
Program Type: **Career Preparatory**
Career Cluster: **Art, A/V Technology and Communication**

	PSAV
Program Number	K700200
CIP Number	0507080108
Grade Level	30, 31
Standard Length	600 Hours
Teacher Certification	BUS ED 1 @ 2 VOE @ 7 TEACH CBE @ 7 BUS DP @ 7 G ELECT DP @ 7 G CLERICAL @ 7 G SECRETAR @ 7 G STENOG @ 4 @ 7 G TEC ELEC @ 7 G $ 7 G COMP SCI @6 @2 COMM ART @7
CTSO	Phi Beta Lambda BPA
SOC Codes (all applicable)	27-1014 27-1024
Facility Code	212 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Art, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Art, A/V Technology and Communication career cluster.

This program is designed to prepare students for employment as a Information Technology Assistant, Production Assistant, Digital Assistant Designer, Graphic Designer, and Multi-Media Designer.

This program offers a broad foundation of knowledge and skills to prepare students for employment in digital publishing positions. The content includes enhanced practical experiences in computer generated art and text, graphic design, graphic production, electronic design skills, preparation of electronic layouts and illustrations, and electronic scanning; and development of specialized skills in multimedia presentations.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the digital publishing industry: planning; management; finance; technical and production skills; underlying principles of technology and design.

21st-Century Skills: Instructional strategies for this program must include methods that require students to acquire 1. Digital-Age Literacy - basic scientific, mathematical, and technological literacies - visual and information literacies - cultural literacy and global awareness; 2. Inventive Thinking - adaptability/ability to manage complexity - curiosity, creativity, and risk taking - higher order thinking and sound reasoning; 3. Effective Communication - teaming, collaboration, and interpersonal skills - personal and social responsibility - interactive communication; 4. High Productivity - ability to prioritize, plan, and manage for results - effective use of real-world tools - relevant, high-quality products.

Program Structure

This program is a planned sequence of instruction consisting of Two Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	GRA0026	Graphic Designer	300 Hours	27-1024
B	GRA0027	Media Designer	300 Hours	27-1014

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these

occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

Future Business Leaders of America (Secondary), Phi Beta Lambda (Postsecondary), and Business Professionals of America are the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals.
02.0 Participate in work-based learning experiences.
03.0 Demonstrate proficiency in digital publishing operations.
04.0 Demonstrate proficiency in digital imaging.

05.0 Demonstrate proficiency in computer skills.
06.0 Perform decision-making activities.
07.0 Demonstrate proficiency in multimedia presentation.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Digital Design 2**
PSAV Number: **K700200**

Course Number: GRA0026
Occupational Completion Point: A
Graphic Designer – 300 Hours – SOC Code 27-1014

01.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:
- 01.01 Prepare a portfolio.
- 01.02 Present a portfolio to an audience.

02.0 Participate in work-based learning experiences -- The student will be able to:
- 02.01 Participate in work-based learning experiences in an information technology environment.
- 02.02 Discuss the use of technology in an information technology environment.

03.0 Demonstrate proficiency in digital publishing operations -- The student will be able to:
- 03.01 Complete projects using a variety of fonts, sizes, leading, and alignments.
- 03.02 Output projects using a variety of devices (e.g., printers, imagesetters).
- 03.03 Design with type using kerning, tracking, horizontal/vertical scale, baseline shift, etc.
- 03.04 Produce projects using tables.
- 03.05 Produce projects using white space.
- 03.06 Assemble multipage documents.
- 03.07 Create documents that use master pages.
- 03.08 Use a variety of styles to produce effective layouts
- 03.09 Produce a document using printer and reader spreads.
- 03.10 Use publishing software to create a pre-press profile.
- 03.11 Produce a variety of designs using layout/paste-up software.

04.0 Demonstrate proficiency in digital imaging -- The student will be able to:
- 04.01 Demonstrate proper use of a scanner/input devices/ digital camera.
- 04.02 Crop and scale photographs electronically.
- 04.03 Demonstrate an understanding of formats and modes (e.g., EPS, TIFF, PICT, JPEG, ASCII, binary).
- 04.04 Demonstrate use of image editing software.
- 04.05 Proofread electronically and manually.

Course Number: GRA0027
Occupational Completion Point: B
Media Designer – 300 Hours – SOC Code 27-1024

01.0 Incorporate knowledge gained from individual assessment and job/career exploration to design an individual career plan that reflects the transition from school to work, lifelong learning, and personal and professional goals -- The student will be able to:

01.01 Prepare a portfolio.
01.02 Present a portfolio to an audience.

02.0 Participate in work-based learning experiences -- The student will be able to:
02.03 Participate in work-based learning experiences in a digital publishing environment.
02.04 Compare and contrast the software applications used in a digital publishing environment.

03.0 Demonstrate proficiency in digital publishing operations -- The student will be able to:
03.12 Produce multiple color designs using different color techniques including process color and spot color.
03.13 Prepare output files using pre-press preparations (e.g., color separation, font management, file management, use of postscript fonts, etc.)
03.14 Read work orders and prepare electronic files that meet all specifications.
03.15 Design a document using grids and formats.
03.16 Produce documents integrating elements of design.
03.17 Demonstrate proficiency in the use of a vector based illustration program.

04.0 Demonstrate proficiency in digital imaging -- The student will be able to:
04.02 Crop and scale photographs electronically.
04.03 Demonstrate proficiency in use of an understanding of formats and modes (e.g., EPS, TIFF, PICT, JPEG, ASCII, binary).
04.04 Demonstrate use of image editing software.
04.06 Complete projects using proper resolution and screen values (e.g., PPI, LPI, DPI).
04.07 Produce electronically retouched photographs.
04.08 Produce projects using a digital camera.
04.09 Scan multiple documents.
04.10 Crop and scale photographs electronically using a scanner.
04.11 Apply the use of proper resolution and screen values (e.g., PPI, LPI, DPI in documents
04.12 Produce electronically retouched photographs using tones, hues, and values.
04.13 Apply special effects to image files.

05.0 Demonstrate proficiency in computer skills -- The student will be able to:
05.01 Understand computer management skills (e.g., install and remove software, folder management, shortcuts, etc.).
05.02 Perform storage management activities using a variety of devices (e.g., CD ROM, monitors, modems, zip drives, jazz drives).
05.03 Understand disk utilities and virus protection activities
05.04 Understand how to update existing software to new versions.

06.0 Perform decision-making activities -- The student will be able to:
06.01 Determine project specifications.

07.0 Demonstrate proficiency in multimedia presentation -- The student will be able to:
07.01 Create PDF files.

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Interior Decorating Services**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	PSAV
Program Number	V200600
CIP Number	0404050105
Grade Level	30, 31
Standard Length	1050 Hours
Teacher Certification	VOC HME EC @2 @4 GEN HME EC @2 HME EC OCC ¢7 @7 G HOMEMAKING ¢7 @2 @7G HOME EC @2 FAM CON SC 1 INT DEC 7G
CTSO	FCCLA
SOC Codes (all applicable)	27-1025 41-3099
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The purpose of this program is to prepare students for employment or advanced training in the residential decoration industry.

This program focuses on broad, transferable skills, stresses the understanding of all aspects of the residential decoration industry and demonstrates such elements of the industry as planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

Program Structure

This program is a planned sequence of instruction consisting of four Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	HEV0412	Sales/Color Consultant	200 Hours	41-3099
B	HEV0452	Furniture Arranger/Space Planner	350 Hours	27-1025
C	HEV0453	Merchandise Stylist/Visual Displayer	300 Hours	27-1025
D	HEV0413	Interior Decorator/ Interior Decorating Consultant	200 Hours	27-1025

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Identify employment opportunities.
02.0 Describe the relationship of human factors to the decorating industry.
03.0 Analyze the principles of color and design.
04.0 Select and use tools and equipment safely.
05.0 Demonstrate sales techniques applicable to the decorating industry.
06.0 Explain the importance of employability and entrepreneurship skills.
07.0 Analyze the benefits of membership in professional organizations.
08.0 Demonstrate mathematics knowledge and skills.
09.0 Demonstrate science knowledge and skills.
10.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
11.0 Explain the importance of sustainable design.
12.0 Identify the basic interior decorating components.
13.0 Develop an understanding of the elements and principles of design.
14.0 Identify and apply principles of space planning.
15.0 Demonstrate the ability to use decorating software.
16.0 Plan and develop a decorating project.
17.0 Demonstrate language arts knowledge and skills.
18.0 Solve problems using critical thinking skills, creativity and innovation.
19.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
20.0 Demonstrate an understanding of basic decorative styles.

21.0 Identify and select furniture for appropriate application
22.0 Identify and select fabric for appropriate application.
23.0 Identify and select floor coverings for appropriate application.
24.0 Identify and select wall treatments for appropriate application.
25.0 Identify and select window treatments for appropriate application.
26.0 Identify and select bedding and accessories for appropriate application.
27.0 Identify, select, and place lighting fixtures for appropriate application.
28.0 Use information technology tools.
29.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
30.0 Demonstrate personal money-management concepts, procedures, and strategies.
31.0 Demonstrate an understanding of entrepreneurship.
32.0 Plan and implement an interior-design project to meet a client’s needs.
33.0 Present a portfolio per industry requirements.
34.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
35.0 Describe the importance of professional ethics and legal responsibilities.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Interior Decorating Services**
PSAV Number: **V200600**

Course Number: HEV0412
Occupational Completion Point: A
Sales/Color Consultant (Representatives, Services, Sales Person & All Other) – 200 Hours – SOC Code 41-3099

01.0 Identify employment opportunities – The student will be able to:
- 01.01 Explain the roles of a decorator and a designer.
- 01.02 Identify employment, career-growth, and advanced-training opportunities in the décor industry.
- 01.03 Describe the personal and professional qualities required for employment in the profession.

02.0 Describe the relationship of human factors to the decorating industry – The student will be able to:
- 02.01 Explain the impact of human factors (such as psychological, physiological, and social needs) on decisions relating to decorating services.
- 02.02 Identify and describe modifications necessary to accommodate individuals with special needs.
- 02.03 Identify and describe the impact of human needs and wants on the cost of decorating services.
- 02.04 Identify and describe the importance of barrier-free design and accessibility related to decorating services.

03.0 Analyze the principles of color and design – The student will be able to:
- 03.01 Identify the elements and principles of design.
- 03.02 Identify and explain the uses of a color wheel.
- 03.03 Identify value and intensity and how they relate to color.
- 03.04 Identify the different color schemes and how they are achieved.
- 03.05 Apply the color schemes to a decorating plan.

04.0 Select and use tools and equipment safely – The student will be able to:
- 04.01 Identify the tools and equipment used in decorating services.
- 04.02 Select appropriate tools and equipment.
- 04.03 Demonstrate and maintain appropriate tools and equipment safely.
- 04.04 Keep an inventory record of tools, equipment, supplies, and materials using computer application software.
- 04.05 Explain the importance of observing Occupational Safety and Health Administration (OSHA) rules and regulations.

05.0 Demonstrate sales techniques applicable to the decorating industry – The student will be able to:
- 05.01 Research different styles of sales techniques.
- 05.02 Practice various sales techniques for the decorating industry.

05.03 Research and recommend decorating products that meet the customer's specifications.
05.04 Demonstrate appropriate computer and telecommunication skills as they relate to sales transactions.
05.05 Recognize the importance of a sense of responsibility and ethical behavior in the interior decorating industry.

06.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
06.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
06.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
06.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
06.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
06.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
06.06 Identify and exhibit traits for retaining employment. ECD 7.0
06.07 Identify opportunities and research requirements for career advancement. ECD 8.0
06.08 Research the benefits of ongoing professional development. ECD 9.0
06.09 Examine and describe entrepreneurship opportunities as a career planning option. ECD 10.0

07.0 Analyze the benefits of membership in professional organizations – The student will be able to:
07.01 Identify purposes, benefits, and functions of professional organizations.
07.02 Work cooperatively as a team to achieve organizational goals.

08.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
08.01 Demonstrate knowledge of arithmetic operations. AF3.2
08.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
08.03 Construct charts/tables/graphs using functions and data. AF3.5

09.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
09.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
09.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

10.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
10.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
10.02 Locate, organize and reference written information from various sources. CM 3.0
10.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
10.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
10.05 Apply active listening skills to obtain and clarify information. CM 7.0
10.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
10.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

Course Number: HEV0452
Occupational Completion Point: B
Furniture Arranger/Space Planner (Interior Designer) – 350 Hours – SOC 27-1025

11.0 Explain the importance of sustainable design -- The student will be able to:
- 11.01 Analyze, evaluate, and select materials and furnishings for sustainable design.
- 11.02 Identify methods and materials used to increase energy efficiency.
- 11.03 Identify and describe energy sources.
- 11.04 Explain the differences between energy efficiencies and energy conservation.

12.0 Identify the basic interior decorating components -- The student will be able to:
- 12.01 Identify decorating styles.
- 12.02 Identify periods and styles of furniture.
- 12.03 Analyze and describe environmental concerns affecting future interiors using internet and textual resources.

13.0 Develop an understanding of the elements and principles of design -- The student will be able to:
- 13.01 Identify and explain the elements of design and their effects on room décor, i.e. texture, pattern, line, form and shape, space, color and light.
- 13.02 Identify and explain the principles of design and their use in interior decorating; proportion, scale, balance, rhythm, emphasis, and harmony.
- 13.03 Analyze good design by using the elements, principles and goals of design.

14.0 Identify and apply principles of space planning -- The student will be able to:
- 14.01 Identify the components of space planning.
- 14.02 Identify architectural symbols.
- 14.03 Read and interpret a blueprint.
- 14.04 Practice calculating areas, sizes, circumferences, square footages, in scale drawings.
- 14.05 Apply space planning techniques in furniture placement.

15.0 Demonstrate the ability to use decorating software -- The student will be able to:
- 15.01 Identify and discuss the benefits of using software in the decorating field.
- 15.02 Complete a tutorial of a decorating software program.
- 15.03 Complete a project using decorating software.

16.0 Plan and develop a decorating project -- The student will be able to:
- 16.01 Develop a decorating project via computer technology.
- 16.02 Select appropriate materials and for the project, i.e. surface treatments, upholstery, case goods, and accessories, applying the elements and principles of design.
- 16.03 Measure and calculate materials required for a decorating project.
- 16.04 Demonstrate the ability to work within a given time frame and budget.

17.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
- 17.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
- 17.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
- 17.03 Present information formally and informally for specific purposes and audiences. AF2.9

18.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
  18.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
  18.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
  18.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
  18.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

19.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
  19.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
  19.02 Explain emergency procedures to follow in response to workplace accidents.
  19.03 Create a disaster and/or emergency response plan.

Course Number: HEV0453
Occupational Completion Point: C
Merchandise Stylist/Visual Displayer (Interior Designer) – 300 Hours – SOC Code 27-1025

20.0 Demonstrate an understanding of basic decorative styles -- The student will be able to:
  20.01 Demonstrate various decorating styles through the use of diagrams, photos, and other resources.
  20.02 Research, identify and describe the various movements in the evolution of housing architecture and interior decorating.
  20.03 Identify future trends in interior décor and design.

21.0 Identify and select furniture for appropriate applications -- The student will be able to:
  21.01 Identify and describe the methods of furniture construction.
  21.02 Compare and contrast types of wood and illustrate comparisons in a presentation, written report or computerized presentation.
  21.03 Describe the types of finishes and the care required for each type of wood.
  21.04 Compare and contrast man-made fibers, i.e. polyester, metal, synthetic plastic, with the natural materials used in furniture construction.
  21.05 Measure and calculate the materials for upholstered items according to client specifications.
  21.06 Select furniture considering its functions and design.

22.0 Identify and select fabric for appropriate application -- The student will be able to:
  22.01 Identify fiber content of fabrics used in decorating.
  22.02 Compare different types of fabrics used in decorating.
  22.03 Define durability.
  22.04 Select fabric that is appropriate for window treatments, upholstery, and accessories.
  22.05 Demonstrate how to coordinate different patterns and textures for an overall decorating scheme.

23.0 Identify and select floor coverings for appropriate application -- The student will be able to:

23.01 Identify and describe the characteristics of different types of floor coverings.
23.02 List and compare durability and maintenance factors for floor covering materials.
23.03 Develop criteria for the selection of floor coverings; include considerations of color, texture, type, style, pattern, client's lifestyle, energy conservation, and environmental safety using multiple resources.
23.04 Identify and select floor-covering materials, using the developed criteria.
23.05 Measure and calculate space and materials for a floor covering application based upon client criteria.

24.0 Identify and select wall treatments for appropriate application -- The student will be able to:
24.01 Identify and describe characteristics of different types of wall treatments.
24.02 Compare durability and maintenance factors for wall treatment materials.
24.03 Calculate the materials needed for a specific wall treatment using criteria provided.

25.0 Identify and select window treatments for appropriate application -- The student will be able to:
25.01 Identify and describe different functions of windows and window treatments.
25.02 Categorize window treatments as hard or soft.
25.03 Describe the characteristics of draperies and their headings.
25.04 Recognize the different types and uses of appropriate hardware for window treatments.
25.05 Develop criteria for the selection of window treatments; include considerations of color, texture, type, style, pattern, client's life style, energy conservation, and environmental safety.
25.06 Select window treatments, using the criteria above.
25.07 Estimate yardage required for various window treatments.
25.08 Select appropriate window fabrics and treatments for various decorating styles.

26.0 Identify and select bedding and accessories for appropriate application -- The student will be able to:
26.01 Identify and describe different styles of accessories.
26.02 Research artwork appropriate for various decorating styles.
26.03 Select accessories, applying the elements and principles of design for a given decorating project.
26.04 Demonstrate appropriate grouping and placement of accessories using the golden mean.
26.05 Select bedding application using established criteria.

27.0 Identify, select, and place lighting fixtures for appropriate application -- The student will be able to:
27.01 Explain the purposes of the different types of lighting
27.02 Research the different types direct and indirect lighting
27.03 Identify the characteristics of incandescent and fluorescent light.
27.04 Identify lighting symbols.
28.0 Use information technology tools--The students will be able to:
28.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0

28.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
28.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
28.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

29.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:
29.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
29.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
29.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
29.04 Employ mentoring skills to inspire and teach others. LT 5.0

30.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:
30.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
30.02 Describe the effect of money management on personal and career goals. FL 3.0
30.03 Develop a personal budget and financial goals. FL3.1
30.04 Complete financial instruments for making deposits and withdrawals. FL3.2
30.05 Maintain financial records. FL3.3
30.06 Read and reconcile financial statements. FL3.4
30.07 Research, compare and contrast investment opportunities.

Course Number: HEV0413
Occupational Completion Point: D
Interior Decorator/Interior Decorating Consultant (Interior Designer) – 200 Hours – SOC Code 27-1025

31.0 Demonstrate an understanding of entrepreneurship -- The student will be able to:
31.01 Define entrepreneurship.
31.02 Research procedures needed for the “start up” of a new business.
31.03 Debate the advantages and disadvantages of business ownership.

32.0 Plan and implement an interior design project to meet a client’s needs – The student will be able to:
32.01 Develop client criteria for decorating project.
32.02 Calculate areas, sizes, circumferences, square footage, etc, for a scale drawing.
32.03 Select appropriate materials and products for the project, i.e. surface treatments, case goods, upholstery, and accessories, applying the elements and principles of design.
32.04 Estimate materials required for client project.
32.05 Determine the budgetary limitations.
32.06 Estimate the cost required to implement the plan and evaluate the estimate in relation to the client’s budget.
32.07 Implement the project, using decorating computer software.
32.08 Deliver an oral presentation of the project.

33.0 Present a portfolio per industry requirements -- The student will be able to:

33.01 Compile and present a portfolio to include a resume, biographical data, project pictures, and any other applicable information.

34.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:

34.01 Describe the nature and types of business organizations. SY 1.0
34.02 Explain the effect of key organizational systems on performance and quality.
34.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
34.04 Explain the impact of the global economy on business organizations. HE 2.0

35.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:

35.01 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
35.02 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
35.03 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
35.04 Interpret and explain written organizational policies and procedures. ELR 2.0

2011-2012

Florida Department of Education
Curriculum Framework

Program Title: **Sewing Technology and Services**
Program Type: **Career Preparatory**
Career Cluster: **Arts, A/V Technology and Communication**

	PSAV
Program Number	V200700
CIP Number	0420.030604
Grade Level	30, 31
Standard Length	900 Hours
Teacher Certification	VOC HME EC @2 @4 HOME EC @2 TAILORING ¢7 @7 G HME EC OCC ¢7 @7 G APPRL MFG ¢7 @7 G FAM CON SC 1 HOMEMAKING ¢7 @2 @7G ART-TEC ¢7 I ART-TEC WTG TECH ED 1 @2 GEN HME EC @2
CTSO	FCCLA
SOC Codes (all applicable)	51-6052 51-6031
Facility Code	234 - http://www.fldoe.org/edfacil/sref.asp (State Requirements for Educational Facilities)
Targeted Occupation List	http://www.labormarketinfo.com/wec/TargetOccupationList.htm
Perkins Technical Skill Attainment Inventory	http://www.fldoe.org/workforce/perkins/perkins_resources.asp
Industry Certifications	http://www.fldoe.org/workforce/fcpea/default.asp
Basic Skills Level	Mathematics: 9 Language: 9 Reading: 9

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Arts, A/V Technology and Communication career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Arts, A/V Technology and Communication career cluster.

The Sewing Technology and Services program is designed to prepare students for initial employment in the garment and textile industry. The core has the foundation and basic skills so the student may progress to other levels of Sewing Technology and Services.

This program focuses on broad, transferable skills, stresses the understanding of all aspects of the garment/textile industry and demonstrates such elements of the industry as planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

The Sewing Technology and Services program is a planned sequence of instruction consisting of six occupational completion points. The Core (OCP A and B) includes the basic fundamentals necessary for completion of the program. Students must complete the core before advancing in the program. The recommended sequence allows students to complete specified portions of the program for employment or to remain for advanced training. A student who completes the applicable competencies at listed occupational completion points may either continue the training program or terminate as an occupational completer. Suggested exit points are detailed below.

Program Structure

This program is a planned sequence of instruction consisting of six Occupational Completion Points.

When offered at the post secondary adult career and technical level, this program is comprised of courses which have been assigned course numbers in the SCNS (Statewide Course Numbering System) in accordance with Section 1007.24 (1), F.S. Career and Technical credit shall be awarded to the student on a transcript in accordance with Section 1001.44(3)(b), F.S.

The following table illustrates the program structure:

OCP	Course Number	Course Title	Course Length	SOC Code
A	HEV0203	Seamstress	200 Hours	51-6052
B	HEV0240	Power Machine Operator	50 Hours	51-6031
C	HEV0211	Alterationist	150 Hours	51-6052
D	HEV0212	Construction Specialist	150 Hours	51-6052
E	HEV0217	Alterationist for Fine Clothing	150 Hours	51-6052
F	HEV0232	Custom Tailor/Patternmaker	200 Hours	51-6052

This program may be offered at the Post Secondary Adult Vocational (PSAV) level.
The following are recommended OCP sequences and exit points:
A-B > exit (250 hours)
A-B, C > exit (400 hours)
A-B, D > exit (400 hours)
A-B, C, E > exit (550 hours)
A-B, D, F > exit (600 hours)
A-B, C, D, E, F > exit (900 hours)

Laboratory Activities

Laboratory activities are an integral part of this program. These activities include instruction in the use of safety procedures, tools, equipment, materials, and processes related to these occupations. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

Career and Technical Student Organization (CTSO)

FCCLA is the appropriate career and technical student organization for providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered. The activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.065, F.A.C.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the program-specific OJT framework apply.

Essential Skills

Essential skills identified by the Division of Career and Adult Education have been integrated into the standards and benchmarks of this program. These skills represent the general knowledge and skills considered by industry to be essential for success in careers across all career clusters. Students preparing for a career served by this program at any level should be able to demonstrate these skills in the context of this program. A complete list of Essential Skills and links to instructional resources in support of these Essential Skills are published on the CTE Essential Skills page of the FL-DOE website (http://www.fldoe.org/workforce/dwdframe/essential_skills.asp).

Basic Skills (if applicable)

In PSAV programs offered for 450 hours or more, in accordance with Rule 6A-10.040, F.A.C. the minimum basic skills grade levels required for postsecondary adult career and technical students to complete this program are: Mathematics 9 Language 9 and Reading 9. These grade level numbers correspond to a grade equivalent score obtained on a state designated basic skills examination. Students may be exempt from meeting the Basic Skills requirements by earning an eligible industry certification. See the Basic Skills Exemption List document for a list of eligible industry certifications (http://www.fldoe.org/workforce/dwdframe/rtf/basic-skills.rtf).

Adult students with disabilities, as defined in Section 1004.02(7), Florida Statutes, may be exempted from meeting the Basic Skills requirements (Rule 6A-10.040). Students served in exceptional student education (except gifted) as defined in s. 1003.01(3)(a), F.S., may also be exempted from meeting the Basic Skills requirement. Each school district and Florida College must adopt a policy addressing procedures for exempting eligible students with disabilities from the Basic Skills requirement as permitted in Section 1004.91(3), F.S.

Students who possess a college degree at the Associate of Applied Science level or higher; who have completed or are exempt from the college entry-level examination pursuant to Section 1008.29, F.S.; or who have passed a state, national, or industry licensure exam are exempt from meeting the Basic Skills requirement (Rule 6A-10.040, F.A.C.)

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's IEP or 504 plan or postsecondary student's accommodations plan to meet individual needs and ensure equal access. Postsecondary students with disabilities must self-identify, present documentation, request accommodations if needed, and develop a plan with their postsecondary service provider. Accommodations received in postsecondary education may differ from those received in secondary education. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (ESE) will need modifications to meet their special needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note postsecondary curriculum cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular Occupational Completion Point (OCP) or a Modified Occupational Completion Point (MOCP). If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete an OCP/MOCP. The student should work on different competencies and new applications of competencies each year toward completion of the OCP(s)/MOCP. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number (for eligible students with disabilities).

Articulation

This program has no statewide articulation agreement approved by the Articulation Coordinating Committee. However, this does not preclude the awarding of credits by any college through local agreements.

For details on articulation agreements which correlate to programs and industry certifications refer to http://www.fldoe.org/workforce/dwdframe/artic_frame.asp.

Standards

After successfully completing this program, the student will be able to perform the following:

01.0 Identify employment opportunities.
02.0 Demonstrate leadership and organizational skills.
03.0 Select, use and care for tools, equipment and supplies safely.
04.0 Identify fiber and textile characteristics.
05.0 Set up, operate, and maintain a conventional sewing machine.
06.0 Set up, operate, and maintain a conventional serger.
07.0 Demonstrate accurate measuring techniques and ability to correlate body shape to pattern selection.
08.0 Demonstrate simple construction techniques.
09.0 Construct a simple garment.
10.0 Demonstrate mathematics knowledge and skills.
11.0 Demonstrate science knowledge and skills.
12.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas.
13.0 Explain the importance of employability and entrepreneurship skills.
14.0 Set up, operate safely, maintain, and adjust industrial machines related to this industry.
15.0 Demonstrate efficient time and motion techniques.
16.0 Create a quality work sample from each industrial machine.
17.0 Demonstrate language arts knowledge and skills.
18.0 Solve problems using critical thinking skills, creativity and innovation.
19.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance.
20.0 Define terminology related to alterations and fittings.
21.0 Fit a custom garment accurately.
22.0 Exhibit positive customer service skills.
23.0 Demonstrate alteration skills on a sample or garment.
24.0 Demonstrate clothing repair on a sample or garment.
25.0 Use information technology tools.
26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives.
27.0 Demonstrate personal money-management concepts, procedures, and strategies.
28.0 Demonstrate garment construction skills.
29.0 Construct specialty garments.
30.0 Research alternative career opportunities within the garment and textile industry.
31.0 Demonstrate an awareness of the history of fashion/garments.
32.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment.
33.0 Describe the importance of professional ethics and legal responsibilities.
34.0 Demonstrate garment alteration skills for fine/tailored clothing.
35.0 Demonstrate clothing repair for fine/tailored clothing.
36.0 Create and manage an alterations business (suggested activity).
37.0 Construct a tailored jacket.
38.0 Draft, design, or drape garments or patterns and construct garments from these patterns.
39.0 Participate in a student internship.

2011-2012

Florida Department of Education
Student Performance Standards

Program Title: **Sewing Technology and Services**
PSAV Number: **V200700**

Course Number: HEV0203
Occupational Completion Point: A
Seamstress (Tailors, Dressmakers, Custom Sewers) -- 200 Hours – SOC Code 51-6052

01.0 Identify employment opportunities – The student will be able to:
- 01.01 Identify occupations in the garment/textile industry and the duties and responsibilities of those occupations.
- 01.02 Identify levels of training required, opportunities for job advancement, and earning/wage levels for garment/textile production occupations.
- 01.03 Analyze current trends as they may affect the future of the industry.

02.0 Demonstrate leadership and organizational skills – The student will be able to:
- 02.01 Identify professional and youth organizations within this career area.
- 02.02 Identify purposes and functions of professional and youth organizations.
- 02.03 Identify roles and responsibilities of members.
- 02.04 Demonstrate cooperation as a group member in achieving organizational goals.
- 02.05 Demonstrate confidence in leadership roles and organizational responsibilities.

03.0 Select, use and care for tools, equipment and supplies safely – The Student will be able to:.
- 03.01 Identify and demonstrate the selection and use of shears.
- 03.02 Identify and demonstrate the selection and use of rotary cutter and other high-tech cutting equipment.
- 03.03 Identify and demonstrate the selection and use of machine maintenance equipment.
- 03.04 Identify and demonstrate the use of measuring tools.
- 03.05 Identify and demonstrate the use of pressing equipment.
- 03.06 Identify and demonstrate safety procedures in using conventional sewing machines.
- 03.07 Identify and demonstrate safety procedures in using home sergers.
- 03.08 Identify and demonstrate safety procedures in using pressing equipment.
- 03.09 Identify and demonstrate safety procedures in using small hand tools.
- 03.10 Identify and demonstrate workroom safety procedures.

04.0 Identify fiber and textile characteristics – The student will be able to:
- 04.01 Identify and describe fiber characteristics.
- 04.02 Identify and describe types of fabric construction.
- 04.03 Identify and describe types of fabric finishes.
- 04.04 Identify and describe types of textiles.
- 04.05 Identify laws and regulations governing the textile industry including labeling laws.

05.0 Set up, operate, and maintain a conventional sewing machine – The Student will be able to:
- 05.01 Identify the parts of the sewing machine.
- 05.02 Identify the process and demonstrate needle insertion, picking the right size needle for the fabric.
- 05.03 Identify the steps and demonstrate threading the sewing machine.
- 05.04 Demonstrate bobbin winding, threading the bobbin case, and inserting the bobbin correctly into the sewing machine.
- 05.05 Demonstrate straight stitching.
- 05.06 Demonstrate stitch length and width selection.
- 05.07 Identify and demonstrate utility.
- 05.08 Identify and demonstrate decorative stitches.
- 05.09 Identify the tension and demonstrate tension adjustment.
- 05.10 Demonstrate light bulb replacement.

06.0 Set up, operate and maintain a conventional serger – The student will be able to::
- 06.01 Identify types of sergers and their characteristics.
- 06.02 Demonstrate threading of the serger following manufacturer’s directions.
- 06.03 Demonstrate tension setting following the manufacturer’s directions.
- 06.04 Demonstrate cleaning and care of the serger following manufacturer’s instructions.
- 06.05 Demonstrate flat locking.
- 06.06 Demonstrate a rolled hem and pin tucking following sample directions.
- 06.07 Demonstrate replacing knives, needles, and light bulbs following manufacturer’s directions.

07.0 Demonstrate accurate measuring techniques and ability to correlate body shape to pattern selection – The student will be able to:
- 07.01 Demonstrate taking body measurements using the correct method.
- 07.02 Select pattern size and determine figure type.
- 07.03 Identify and describe styles that suit various body types.
- 07.04 Select a pattern and fabric for body type.

08.0 Demonstrate simple construction techniques – The student will be able to:
- 08.01 Demonstrate basic hand stitching skills.
- 08.02 Identify and describe characteristics of a properly fitted garment.
- 08.03 Interpret verbal, written, and visual directions.
- 08.04 Prepare fabric.
- 08.05 Adjust patterns following pattern directions.
- 08.06 Lay out, pin, cut, and mark fabric according to pattern directions.
- 08.07 Demonstrate stay stitching and ease stitching.
- 08.08 Demonstrate stitching darts and tucks.
- 08.09 Identify and match garment pieces using markings and stitching following directions.
- 08.10 Demonstrate correct pressing techniques following fabric requirements.
- 08.11 Demonstrate a casing.
- 08.12 Demonstrate machine hemming following machine manual instructions.
- 08.13 Apply fusible and non-fusible interfacing according to manufacturer’s instructions.
- 08.14 Apply shaped facings.
- 08.15 Apply zippers using different methods, following manufacturer’s directions.
- 08.16 Demonstrate understitching following prescribed directions.

08.17 Apply waistbands and cuffs following prescribed directions.
08.18 Make machine buttonholes according to manufacturer's instructions.
08.19 Make and attach collars according to pattern/teacher instructions.
08.20 Construct sleeve according to manufacturer's instructions.
08.21 Put in side seam pockets; make and apply patch pockets according to manufacturer's specifications.
08.22 Assemble a portfolio including all samples.

09.0 Construct a simple garment – The student will be able to:
09.01 Construct garment/garments that includes a zipper, seaming, waistband, darts, interfacing, seam finishing, hem, closure and pocket. Include garment (or photo) in portfolio.

10.0 Demonstrate mathematics knowledge and skills--The students will be able to: AF3.0
10.01 Demonstrate knowledge of arithmetic operations. AF3.2
10.02 Analyze and apply data and measurements to solve problems and interpret documents. AF3.4
10.03 Construct charts/tables/graphs using functions and data. AF3.5

11.0 Demonstrate science knowledge and skills--The students will be able to: AF4.0
11.01 Discuss the role of creativity in constructing scientific questions, methods and explanations. AF4.1
11.02 Formulate scientifically investigable questions, construct investigations, collect and evaluate data, and develop scientific recommendations based on findings. AF4.3

12.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
12.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
12.02 Locate, organize and reference written information from various sources. CM 3.0
12.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
12.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
12.05 Apply active listening skills to obtain and clarify information. CM 7.0
12.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0
12.07 Exhibit public relations skills that aid in achieving customer satisfaction. CM 10.0

13.0 Explain the importance of employability and entrepreneurship skills--The students will be able to:
13.01 Identify and demonstrate positive work behaviors needed to be employable. ECD 1.0
13.02 Develop personal career plan that includes goals, objectives, and strategies. ECD 2.0
13.03 Examine licensing, certification, and industry credentialing requirements. ECD 3.0
13.04 Maintain a career portfolio to document knowledge, skills, and experience. ECD 5.0
13.05 Evaluate and compare employment opportunities that match career goals. ECD 6.0
13.06 Identify and exhibit traits for retaining employment. ECD 7.0
13.07 Identify opportunities and research requirements for career advancement. ECD 8.0
13.08 Research the benefits of ongoing professional development. ECD 9.0
13.09 Examine and describe entrepreneurship opportunities as a career planning option. **ECD 10.0**

18.0 Solve problems using critical thinking skills, creativity and innovation--The students will be able to:
  18.01 Employ critical thinking skills independently and in teams to solve problems and make decisions. PS1.0
  18.02 Employ critical thinking and interpersonal skills to resolve conflicts. PS 2.0
  18.03 Identify and document workplace performance goals and monitor progress toward those goals. PS 3.0
  18.04 Conduct technical research to gather information necessary for decision-making. PS 4.0

NOTE:
It is recommended when using OPC A-1 as a single semester that the instructor preselects a simple skirt or shorts pattern for completion during the class. It should include an elastic case waistband and a machine straight stitch hem. Seam finishes can be zigzag, turned under once and stitched or if fabric does not fray a finish is not required.

Course Number: HEV0240
Occupational Completion Point: B
Power (Sewing) Machine Operator -- 50 Hours – SOC Code 51-6031

14.0 Set up, operate safely, maintain, and adjust industrial machines related to this industry – The student will be able to:
  14.01 Operate the following industrial machines accurately and efficiently: industrial sewing machine; single needle straight stitch machine; industrial serger; coverstitch; buttonsewer; buttonholer; walking foot; merrow, electronic programmable machine.

15.0 Demonstrate efficient time and motion techniques – The student will be able to:
  15.01 Explain the principles of time and motion techniques.
  15.02 Distinguish between program bundles, modular manufacturing, and combine manufacturing techniques.

16.0 Create a quality work sample from each industrial machine – The student will be able to:
  16.01 Demonstrate ability to use each industrial machine by creating a sample from each machine and adding it to portfolio.
  16.02 Participate in a timed test sample that correlates to industry.

17.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
  17.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4
  17.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
  17.03 Present information formally and informally for specific purposes and audiences. AF2.9

19.0 Demonstrate the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance--The students will be able to:
  19.01 Describe personal and jobsite safety rules and regulations that maintain safe and healthy work environments. SHE 1.0
  19.02 Explain emergency procedures to follow in response to workplace accidents.
  19.03 Create a disaster and/or emergency response plan.

32.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
  32.01 Describe the nature and types of business organizations. SY 1.0
  32.02 Explain the effect of key organizational systems on performance and quality.
  32.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
  32.04 Explain the impact of the global economy on business organizations. HE 2.0

Course Number: HEV0211
Occupational Completion Point: C
Alterationist (Tailors, Dressmakers, Custom Sewers) -- 150 Hours – SOC Code 51-6052

20.0 Define terminology related to alterations and fittings – The student Will be able to:
  20.01 Define fitting, basting, taper, flare, marking, alteration ticket, crotch rise, inseam, and outseam.

21.0 Fit a custom garment accurately – The student will be able to:
  21.01 Pin-fit garments to a customer using knowledge gained within the program.
  21.02 Chalk and baste a garment to fit a customer.
  21.03 Demonstrate appropriate fitting techniques when dealing with customers.

22.0 Exhibit positive customer service skills – The student will be able to:
  22.01 Demonstrate effective communication skills.
  22.02 Demonstrate ability to use technology in the workplace.
  22.03 Prepare alteration tickets accurately.

23.0 Demonstrate alteration skills on a sample or garment – The student will be able to:
  23.01 Remove stitches in ready-made garments without damaging fabric.
  23.02 Construct and finish seams.
  23.03 Mark and even a hemline following guidelines.
  23.04 Lengthen and shorten hems in pants, skirts, or dresses (include cuffs and use of hem tape)
  23.05 Remove the flare from pant legs following a given set of directions.
  23.06 Taper a skirt following a given set of directions.
  23.07 Convert tucks to gathers and add gathers following a given set of instructions.
  23.08 Shorten the crotch rise in a garment/sample.
  23.09 Take in the waist on a man’s garment/sample.
  23.10 Take in the waist on a woman’s garment/sample.
  23.11 Take in the side seams on a blouse/shirt.
  23.12 Shorten sleeves at the cuff on a garment/sample.
  23.13 Shorten sleeves at the shoulder cap on a garment/sample.
  23.14 Make casing and insert elastic in waistband following a given set of instructions.
  23.15 Press altered areas using acquired pressing techniques.

24.0 Demonstrate clothing repair on a garment or sample – The student will be able to:
  24.01 Reinforce seams and buttonholes on a garment/sample.
  24.02 Replace zippers in various types of garments/samples (including fly/jeans).
  24.03 Apply patches on a garment/sample.
  24.04 Replace various types of buttons on a garment/sample.
  24.05 Demonstrate appropriate pressing techniques on repaired garments/samples.

25.0 Use information technology tools--The students will be able to:

- 25.01 Use Personal Information Management (PIM) applications to increase workplace efficiency. IT 1.0
- 25.02 Employ technological tools to expedite workflow including word processing, databases, reports, spreadsheets, multimedia presentations, electronic calendar, contacts, email, and internet applications. IT 2.0
- 25.03 Employ computer operations applications to access, create, manage, integrate, and store information. IT 3.0
- 25.04 Employ collaborative/groupware applications to facilitate group work. IT 4.0

26.0 Demonstrate leadership and teamwork skills needed to accomplish team goals and objectives--The students will be able to:

- 26.01 Employ leadership skills to accomplish organizational goals and objectives. LT1.0
- 26.02 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. LT3.0
- 26.03 Conduct and participate in meetings to accomplish work tasks. LT 4.0
- 26.04 Employ mentoring skills to inspire and teach others. LT 5.0

Course Number: HEV0212
Occupational Completion Point: D
Construction Specialist (Tailors, Dressmakers, Custom Sewers) -- 150 Hours –
SOC Code 51-6052

27.0 Demonstrate personal money-management concepts, procedures, and strategies--The students will be able to:

- 27.01 Identify and describe the services and legal responsibilities of financial institutions. FL 2.0
- 27.02 Describe the effect of money management on personal and career goals. FL 3.0
- 27.03 Develop a personal budget and financial goals. FL3.1
- 27.04 Complete financial instruments for making deposits and withdrawals. FL3.2
- 27.05 Maintain financial records. FL3.3
- 27.06 Read and reconcile financial statements. FL3.4
- 27.07 Research, compare and contrast investment opportunities.

28.0 Demonstrate garment construction skills – The student will be able to:

- 28.01 Select appropriate fabric for pattern.
- 28.02 Create samples of the following:
    - 1 Set in sleeves
    - 2 Belt loops
    - 3 Pockets – welt, side, back
    - 4 Fly zipper
    - 5 Invisible zipper
    - 6 Trim application
    - 7 Bias conversion to trim
    - 8 Mitered corners
    - 9 Boning
    - 10 Matching plaids and stripes
    - 11 Construction on napped fabrics, vinyl, spandex, lingerie fabric, velvet, lace,
    - 12 sequins, and beads

13 French seaming
14 Flat felt seams
15 Seam finishes

29.0 Construct specialty garments – The student will be able to:
29.01 Construct a specialty garment(s) according to teacher instructions - project must include a minimum number of construction skills as designated by teacher.

30.0 Research alternative career opportunities within the garment and textile industry – The student will be able to:
30.01 Create a presentation on non-traditional career paths (costume design, theater, entertainment, buyers, fabric store owners etc.) in the garment/textile industry.

31.0 Demonstrate an awareness of the history of fashion/garments – The student will be able to:
31.01 Describe the progression of fashion history.
31.02 Prepare an oral presentation on garments/fashion during a specific time period in history.
32.0 Describe the roles within teams, work units, departments, organizations, inter-organizational systems, and the larger environment--The students will be able to:
32.01 Describe the nature and types of business organizations. SY 1.0
32.02 Explain the effect of key organizational systems on performance and quality.
32.03 List and describe quality control systems and/or practices common to the workplace. SY 2.0
32.04 Explain the impact of the global economy on business organizations. HE 2.0

33.0 Describe the importance of professional ethics and legal responsibilities--The students will be able to:
16.03 Evaluate and justify decisions based on ethical reasoning. ELR 1.0
16.04 Evaluate alternative responses to workplace situations based on personal, professional, ethical, legal responsibilities, and employer policies. ELR1.1
16.05 Identify and explain personal and long-term consequences of unethical or illegal behaviors in the workplace. ELR1.2
16.06 Interpret and explain written organizational policies and procedures. ELR 2.0

12.0 Use oral and written communication skills in creating, expressing and interpreting information and ideas--The students will be able to:
12.01 Select and employ appropriate communication concepts and strategies to enhance oral and written communication in the workplace. CM 1.0
12.02 Locate, organize and reference written information from various sources. CM 3.0
12.03 Design, develop and deliver formal and informal presentations using appropriate media to engage and inform diverse audiences. CM 5.0
12.04 Interpret verbal and nonverbal cues/behaviors that enhance communication. CM 6.0
12.05 Apply active listening skills to obtain and clarify information. CM 7.0
12.06 Develop and interpret tables and charts to support written and oral communications. CM 8.0

17.0 Demonstrate language arts knowledge and skills--The students will be able to: AF 2.0
17.01 Locate, comprehend and evaluate key elements of oral and written information. AF2.4

17.02 Draft, revise, and edit written documents using correct grammar, punctuation and vocabulary. AF2.5
Present information formally and informally for specific purposes and audiences.**AF2**

Course Number: HEV0217
Occupational Completion Point: E
Alterationist for Fine Clothing (Tailors, Dressmakers, Custom Sewers) -- 150 Hours – SOC Code 51-6052

34.0 Demonstrate garment alteration skills for fine/tailored clothing – The Student will be able to: (using samples or garments)

- 34.01 Add or remove shoulder pads following specific instructions.
- 34.02 Lengthen and decrease pants crotch according to customer body measurements.
- 34.03 Increase and decrease waist size of pants, skirts, and dresses according to customer body measurements.
- 34.04 Correct skirts, dresses, and pants for high hip or swayback using proper adjustment techniques.
- 34.05 Remove and add cuffs to pants adjusting to client’s height difference.
- 34.06 Widen and narrow cuffs according to client’s height difference.
- 34.07 Shorten and lengthen bodices according to client’s body measurements.
- 34.08 Increase and decrease bust on bodices according to customer measurements using proper adjustment techniques.
- 34.09 Narrow shoulder lines on a bodice according to customer measurements using proper adjustment techniques.
- 34.10 Redistribute ease in sleeve cap adjusting fullness according to specified instructions.
- 34.11 Add and remove sleeve cuffs according to specified instructions.
- 34.12 Lengthen and narrow cuffs on pants and sleeves according to customer specifications.
- 34.13 Shorten wristlets on knitted sleeves according to customer/manufacturer’s specifications.
- 34.14 Reshape trouser legs using proper adjustment techniques.
- 34.15 Taper men’s shirts using proper adjustment techniques.
- 34.16 Miter hem corners, including seamed mitered corner and hand whipped miter using proper construction techniques.
- 34.17 Add and remove tucks, pleats, and darts using proper construction techniques.
- 34.18 Increase and decrease the width of pleats following proper construction techniques.
- 34.19 Alter closure and fasteners, such as: buttons, zippers, snaps, thread loops, and hooks and eyes according to customer specifications.
- 34.20 Add, remove, lengthen, and shorten belt loops according to customer specifications.
- 34.21 Lengthen and shorten belts to fit customer form.
- 34.22 Add and remove pockets according to fabric requirements.
- 34.23 Alter size of pockets using proper alteration techniques.
- 34.24 Shorten sleeves on a tailored jacket.
- 34.25 Narrow lapels on a tailored jacket.
- 34.26 Lower the collar on a suit jacket.
- 34.27 Construct a gusset in trousers.
- 34.28 Construct a gusset in a dance garment.

35.0 Demonstrate clothing repair for fine/tailored clothing – The student Will be able to:
  35.01 Apply patches to holes or rips in knit or woven fabrics following specified fabric instructions.
  35.02 Repair frayed parts of garments, such as: cuffs (turn), collars (turn), and seams following proper repair techniques for specified fabric.

36.0 Create and manage an alterations business (suggested activity) – The Student will be able to:
  36.01 Identify the occupations necessary to run an alteration business.
  36.02 Develop a plan for the alterations business including job assignments and responsibilities, hours of operation, marketing, fees charged, etc.
  36.03 Implement the plan for the alterations business.

Course Number: HEV0232
Occupational Completion Point: F
Custom Tailor/Patternmaker (Tailors, Dressmakers, Custom Sewers) – 200 Hours – SOC Code 51-6052

37.0 Construct a tailored jacket – The student will be able to:
  37.01 Select suitable fabric for a tailored jacket using identified criteria.
  37.02 Select suitable hair canvas, interfacing, linings, and underlining for specified fabric.
  37.03 Prepare fabrics and alter patterns using pattern directions.
  37.04 Lay out patterns, bias, plaid, or one-way prints using correct layout procedures.
  37.05 Cut patterns, fabric, hair canvas, and linings according to given directions.
  37.06 Tailor tack markings using the proper techniques.
  37.07 Identify tailor basting and tailor baste layers.
  37.08 Tape roll line and edges following prescribed method.
  37.09 Pad-stitch lapels and collars following prescribed method.
  37.10 Baste and fit a garment according to customer specifications.
  37.11 Stitch seams using correct stitches for fabric.
  37.12 Apply seam finishes chosen from practice samples.
  37.13 Construct tailored pockets following given directions.
  37.14 Construct bound buttonholes following given directions.
  37.15 Construct chest pieces, shoulder pads, and sleeve heads following given directions.
  37.16 Set in sleeves following given directions.
  37.17 Construct and apply upper collar and facings following given directions.
  37.18 Catch-stitch all edges using proper method of stitching.
  37.19 Fit a garment using the customer’s measurements.
  37.20 Construct and apply linings according to fabric requirements.
  37.21 Construct hems using proper technique for fabric/garment style.
  37.22 Identify steps of and demonstrate tailor pressing.

38.0 Draft, design, or drape garments or patterns and construct garments from these patterns – The student will be able to:
  38.01 Demonstrate taking body measurements using the correct measuring method.
  38.02 Compare and alter basic patterns according to given instructions.
  38.03 Construct a basic muslin shell using customer’s measurements and/or pattern.
  38.04 Transfer fitting changes to paper patterns following given directions.
  38.05 Construct an oak tag board sloper from muslin following given demonstration.

38.06 Draft pattern bodice, skirt, collar, and neckline using a sloper based upon customer specifications.
38.07 Define draping and demonstrate the draping method of dress design.
38.08 Identify design systems and demonstrate an understanding of design systems (i.e. animated/digital images).

39.0 Participate in a student internship – The student will be able to:
39.01 Perform tailoring and pattern making activities under supervision on the job.