Florida Department of Education Curriculum Framework

Course Title:Orientation to Health Science ProfessionsCourse Type:Orientation/ExploratoryCareer Cluster:Health Science

| Secondary – Middle School | | |
|---|-----------------------------------|--|
| Course Number | 8400110 | |
| CIP Number | 03179999OR | |
| Grade Level | 6-8 | |
| Standard Length | Semester | |
| eacher Certification Refer to the Course Structure section. | | |
| CTSO | HOSA: Future Health Professionals | |

<u>Purpose</u>

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 the Health Science career cluster.

The content includes but is not limited to basic information about the kinds of jobs and workers involved the various career paths, financial rewards, occupational hazards, and educational requirements. Information concerning the practices for promoting good health is included

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

This program is a planned sequence of instruction consisting of 1 course.

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|---|----------------------------------|----------|
| 8400110 | Orientation to Health Science Professions | ANY HEALTH OCCUP G * HEALTH 6 | Semester |

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition.

<u>Standards</u>

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

- 01.0 Recognize progress in health care service.
- 02.0 Demonstrate an awareness of health careers and related employability skills.
- 03.0 Recognize basic communication skills in the healthcare setting.
- 04.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker.
- 05.0 Demonstrate an understanding of principles of wellness and disease.
- 06.0 Perform basic health care skills.
- 07.0 Demonstrate occupational safety skills related to the employer, employee and the patient in the healthcare setting.

Florida Department of Education Student Performance Standards

Course Title:Orientation to Health Science ProfessionsCourse Number:8400110Course Length:Semester

CTE Standards and Benchmarks

01.0 Recognize progress in health care service. - The student will be able to:

01.01 Compare medical progress from ancient times to the present. For example: surgical techniques, anesthesia, treatment and equipment.

01.02 Discuss health care leaders who brought about change and progress from ancient times to the present. For example: Hippocrates, Edward Jenner, Joseph Lister, Alexander Fleming, Marie Curie, and Clara Barton.

01.03 Demonstrate knowledge of how advances in science have impacted beliefs and practices from ancient times to the present.

02.0 Demonstrate an awareness of health careers and related employability skills. – The student will be able to:

02.01 Complete a career inventory to match student interest with potential healthcare careers.

02.02 List employability/soft skills and characteristics needed to be successful in the workplace. For Example: punctuality, dependability, and communication skills.

02.03 Identify the characteristics of healthcare professionals.

02.04 Identify several professions in each of the Health Science Career Pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, Bio-technology Research and Development.

02.05 List the advantages and disadvantages of one occupation in each pathway including the following factors; job description, career pathway/area of interest, and salary range.

03.0 Recognize basic communication skills in the healthcare setting. – The student will be able to:

03.01 Demonstrate an understanding of interpersonal communication skills such as active listening, verbal, non-verbal and written language.

03.02 Demonstrate the ability to break medical terms into their word parts.

03.03 Discuss common abbreviations and symbols used in healthcare professions.

03.04 Identify technology used for communication in healthcare professions and proper etiquette for its' use.

04.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker. – The student will be able to:

| | 04.01 Describe the importance of why accurate calculations and effective problem solving skills are required. |
|------|---|
| | |
| | 04.02 Calculate mathematical problems and measurements related to health care. |
| | 04.03 Convert common weights, measure, and volumes to metric as applied in the health care setting. |
| | 04.04 Accurately tell time using both standard and international/military time formats. |
| 05.0 | Demonstrate an understanding of principles of wellness and disease The student will be able to: |
| | 05.01 Describe how cultural and individual differences relate to wellness and quality of life and how these differences impact health problems of society. |
| | 05.02 Demonstrate an understanding of the risk factors that contribute to illness. |
| | 05.03 Identify consequences of substance abuse and high risk behaviors. |
| | 05.04 Describe strategies for prevention of diseases including health screenings and examinations. |
| | 05.05 Explain basic concepts of positive self-image, body and mental wellness and the effect stress has on both. |
| | 05.06 Explore the need for proper nutrition and water intake to maintain wellness. |
| 06.0 | Perform basic health care skills. – The student will be able to: |
| | 06.01 Measure and record (graph) height and weight. |
| | 06.02 Measure and record temperature, pulse, and respiration (TPR). |
| | 06.03 Demonstrate medical aseptic technique by using proper hand washing skills. |
| | 06.04 Demonstrate hands-only CPR. |
| 07.0 | Demonstrate occupational safety skills related to the employer, employee and the patient in the healthcare setting. – The student will be able to: |
| | 07.01 Recognize safety concerns related to the practice of health care. |
| | 07.02 Demonstrate an understanding for the importance of fire safety practices including prevention, evacuation plans (R.A.C.E.) and t use of a fire extinguisher (P.A.S.S.). |
| | 07.03 Demonstrate safety habits that will prevent injury to health care workers, co-workers, and patients including proper use personal protective equipment (PPE) and infection control practices. |

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

The intended progression for the Health Science Middle School courses is Introduction to Health Science Career Pathways (8709350 & 8709360), Orientation to Health Science Professions (8400110) and Exploration of Health Science Professions (8400310 & 8400210). By offering the middle school courses in the intended progression, each course increases in complexity, rigor and skill level as appropriate.

Special projects that are related to occupational clusters are provided, including making dental molds, designing eye glasses, fingerprinting, and role playing activities of daily living as a handicapped individual, developing an emergency evacuation plan for their own home, menu planning, and visualizing x-rays. Team teaching and integration of the curriculum with English, Math and Science is encouraged. Guest speakers from industry make an important contribution to the effectiveness of this course.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the intercurricular career and technical student organization 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.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. 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 (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their 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 and regulated secondary programs cannot be modified.

Florida Department of Education Curriculum Framework

Course Title:Exploration of Health Science Professions and Career Planning*Course Type:Orientation/Exploratory and Career PlanningCareer Cluster:Health Science

| Secondary – Middle School | | |
|--|-----------------------------------|--|
| Course Number | 8400210 | |
| CIP Number | 03179999CE | |
| Grade Level | 6-8 | |
| Standard Length | Semester | |
| Teacher Certification Refer to the Course Structure section. | | |
| CTSO | HOSA: Future Health Professionals | |

*Effective July 1, 2017, there is no longer a promotion requirement for middle grades students to complete a Career and Education Planning course. However, these courses will continue to be available and should be taught integrating the eight career and education planning course standards. The MyCareerShines powered by Kuder® career planning system is available free of charge to all Florida middle and high schools to assist students in exploring career options and developing an academic and career plan.

Purpose

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 the Health Science career cluster. The content includes but is not limited to exploratory activities relating to all health occupational clusters. The course also includes an introduction to medical ethics, consumerism, and characteristics of health care workers, community health agencies and basic computer literacy.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

The purpose of this course is to give students initial exposure to the skills and attitudes associated with a broad range of occupations relating to careers in health, including job requirements and tasks performed, to assist students in making informed decisions regarding their future academic and occupational goals.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

This program is a planned sequence of instruction consisting of 1 course.

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|---|--|----------|
| 8400210 | Exploration of Health Science Professions and Career Planning | ANY HEALTH OCCUP G * FAM CON SC 1 HEALTH 6 | Semester |

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition.

<u>Standards</u>

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

- 01.0 Demonstrate a well-rounded understanding of healthcare professions.
- 02.0 Demonstrate an understanding of the importance of legal and ethical behavior related to health care.
- 03.0 Perform basic communication skills in the healthcare setting.
- 04.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker.
- 05.0 Apply scientific principles to the health care field.
- 06.0 Perform basic health care skills.
- 07.0 Demonstrate occupational safety skills related to the employer, employee and the patient in the healthcare setting.

Listed below are the eight career and education planning course standards:

- 08.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.
- 09.0 Develop skills to locate, evaluate, and interpret career information.
- 10.0 Identify and demonstrate processes for making short and long term goals.
- 11.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship.
- 12.0 Understand the relationship between educational achievement and career choices/postsecondary options.
- 13.0 Identify a career cluster and related pathways through an interest assessment that match career and education goals.
- 14.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.
- 15.0 Demonstrate knowledge of technology and its application in career fields/clusters.

Florida Department of Education Student Performance Standards

Course Title:Exploration of Health Science Professions and Career PlanningCourse Number:8400210Course Length:Semester

CTE Standards and Benchmarks

01.0 Demonstrate a well-rounded understanding of healthcare professions. – The student will be able to:

01.01 Explore the major scientific advancements that have contributed to the evolution of healthcare.

01.02 Research contributions made in the field of medical science and their impact on the health care field.

01.03 Identify types of education and training levels (OJT, HSTE, AA, BS/BA, MS, and Doctoral) as related to health careers.

01.04 Compare and contrast the health science career pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, Bio-technology Research and Development.

01.05 List the advantages and disadvantages of one occupation in each pathway including the following factors; job description, career pathway/area of interest, salary range, educational requirements, and job outlook.

01.06 Research and describe a healthcare profession of interest identified through a career inventory assessment.

02.0 Demonstrate an understanding of the importance of legal and ethical behavior related to health care. – The student will be able to:

02.01 Identify responsibilities in maintaining ethical standards, confidentiality, and the patient's rights.

02.02 Identify and define terms related to the legal and ethical aspects of the health care industry. For example: malpractice, negligence, invasion of privacy, quackery, ethics and law, Patients' Bill of Rights, licensure.

03.0 Perform basic communication skills in the healthcare setting. – The student will be able to:

03.01 Demonstrate interpersonal communication skills such as active listening, verbal, non-verbal and written language in the health care setting.

03.02 Identify technology used for communication in healthcare professions and proper etiquette for its' use.

03.03 Demonstrate use of medical terminology and abbreviations associated with healthcare professions.

04.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker. – The student will be able to:

04.01 Analyze case studies or current events where adverse consequences resulted from mathematical medical error.

| OTE S | tandards and Benchmarks |
|-------|---|
| | |
| | 04.02 Convert common weights, measure, and volumes to metric as applied in the health care setting.04.03 Accurately identify and perform appropriate numeric procedures with problems found in numeric, symbolic, or word form as they |
| | relate to the occupations. |
| | 04.04 Accurately tell time using both standard and international/military time formats. |
| 05.0 | Apply scientific principles to the health care field. – The student will be able to: |
| | 05.01 Identify the overall organization of the human body. |
| | 05.02 Describe the basic structure and function of the body systems of the human body. |
| | 05.03 Describe how the systems of the human body work together to maintain homeostasis. |
| | 05.04 Describe mechanisms of disease transmission, the Chain of Infection, prevention, and standard precautions. |
| 06.0 | Perform basic health care skills. – The student will be able to: |
| | 06.01 Measure and record (graph) height and weight. |
| | 06.02 Measure and record temperature, pulse, blood pressure, and respiration while recognizing the normal ranges for each. |
| | 06.03 Demonstrate medical aseptic technique by hand washing, gloving and application of personal protective equipment (PPE). |
| | 06.04 Demonstrate basic first aid skills (i.e. bleeding, fractures, and musculoskeletal emergencies). |
| | 06.05 Demonstrate Cardiopulmonary Resuscitation (CPR) and care for a choking victim. |
| | 06.06 Demonstrate basic skills used within the healthcare professions may include the following: |
| | 06.06.01 Visualizing X-rays 06.06.02 Conduct vision testing (Snellen chart, peripheral vision, color blindness) |
| | 06.06.03 Conduct basic hearing test |
| | 06.06.04 Measure respiratory capacity/output |
| | 06.06.05 Range-of-Motion exercises |
| 07.0 | 06.06.06 Conduct simulated ABO blood-typing |
| 07.0 | Demonstrate occupational safety skills related to the employer, employee and the patient in the healthcare setting. – The student will be able to: |
| | 07.01 Recognize safety concerns related to the practice of health care. |
| | 07.02 Demonstrate safety habits that will prevent injury to health care workers, co-workers, and patients including proper use personal protective equipment (PPE) and infection control practices. |
| | 07.03 Identify poisons and hazardous materials to include the use and interpretation of a Safety Data Sheet (SDS) form. |

| CTE S | Standards and Benchmarks | |
|--------|---|--|
| | 07.04 Demonstrate an understanding for the importance of fire safety practices including prevention, evacuation plans (R.A.C.E.) and the use of a fire extinguisher (P.A.S.S.). | |
| | 07.05 Explore basic information on the dangers of blood borne diseases in healthcare including but not limited to HIV/AIDS and Hepatitis B. | |
| | 07.06 Perform proper body mechanics to prevent self and patient injuries. | |
| Listed | below are the standards that must be met to satisfy the requirements of Section 1003.4156, Florida Statutes. | |
| | udent will be able to: | |
| 08.0 | Describe the influences that societal, economic, and technological changes have on employment trends and future training. | |
| 09.0 | Develop skills to locate, evaluate, and interpret career information. | |
| 10.0 | Identify and demonstrate processes for making short and long term goals. | |
| 11.0 | Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship. | |
| 12.0 | Understand the relationship between educational achievement and career choices/postsecondary options. | |
| 13.0 | Identify a career cluster and related pathways through an interest assessment that match career and education goals. | |
| 14.0 | Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals. | |
| 15.0 | Demonstrate knowledge of technology and its application in career fields/clusters. | |

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

The intended progression for the Health Science Middle School courses is Introduction to Health Science Career Pathways (8709350 & 8709360), Orientation to Health Science Professions (8400110) and Exploration of Health Science Professions (8400310 & 8400210). By offering the middle school courses in the intended progression, each course increases in complexity, rigor and skill level as appropriate.

Special projects that are related to each occupational cluster are provided, including role playing activities related to specific careers, visualizing xrays and crutch-walking, operating the microscope, and specific lab procedures. Team teaching and integration of the curriculum with English, Math and Science is encouraged.

Guest speakers from industry and related field trips make important contributions to the effectiveness of this course.

Career and Technical Student Organization (CTSO)

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Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. 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.

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Florida Department of Education Curriculum Framework

2019 - 2020

Course Title:Exploration of Health Science ProfessionsCourse Type:Orientation/ExploratoryCareer Cluster:Health Science

| Secondary – Middle School | | |
|--|-----------------------------------|--|
| Course Number | 8400310 | |
| CIP Number | 03179999EX | |
| Grade Level | 6-8 | |
| Standard Length | Semester | |
| Feacher Certification Refer to the Course Structure section. | | |
| CTSO | HOSA: Future Health Professionals | |

<u>Purpose</u>

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 the Health Science career cluster. The content includes but is not limited to exploratory activities relating to all health occupational clusters. The course also includes an introduction to medical ethics, consumerism, and characteristics of health care workers, community health agencies and basic computer literacy.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

The purpose of this course is to give students initial exposure to the skills and attitudes associated with a broad range of occupations relating to careers in health, including job requirements and tasks performed, to assist students in making informed decisions regarding their future academic and occupational goals.

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Course Structure

This program is a planned sequence of instruction consisting of 1 course.

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|---------------|---|--|----------|
| 8400310 | Exploration of Health Science Professions | ANY HEALTH OCCUP G * FAM CON SC 1 HEALTH 6 | Semester |

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<u>Standards</u>

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- 05.0 Apply scientific principles to the health care field.
- 06.0 Perform basic health care skills.
- 07.0 Demonstrate occupational safety skills related to the employer, employee and the patient in the healthcare setting.

Florida Department of Education Student Performance Standards

Course Title:Exploration of Health Science ProfessionsCourse Number:8400310Course Length:Semester

CTE Standards and Benchmarks

01.0 Demonstrate a well-rounded understanding of healthcare professions. – The student will be able to:

01.01 Explore the major scientific advancements that have contributed to the evolution of healthcare.

01.02 Research contributions made in the field of medical science and their impact on the health care field.

01.03 Identify types of education and training levels (OJT, HSTE, AA, BS/BA, MS, and Doctoral) as related to health careers.

01.04 Compare and contrast the health science career pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, Bio-technology Research and Development.

01.05 List the advantages and disadvantages of one occupation in each pathway including the following factors; job description, career pathway/area of interest, salary range, educational requirements and job outlook.

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03.01 Demonstrate interpersonal communication skills such as active listening, verbal, non-verbal and written language in the health care setting.

03.02 Identify technology used for communication in healthcare professions and proper etiquette for its' use.

03.03 Demonstrate use of medical terminology and abbreviations associated with healthcare professions.

04.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker. – The student will be able to:

04.01 Analyze case studies or current events where adverse consequences resulted from mathematical medical error.

| CTE S | tandards and Benchmarks | | |
|-------|---|--|--|
| | 04.02 Convert common weights, measure, and volumes to metric as applied in the health care setting. | | |
| | 04.03 Accurately identify and perform appropriate numeric procedures with problems found in numeric, symbolic, or word form as they relate to the occupations. | | |
| | 04.04 Accurately tell time using both standard and international/military time formats. | | |
| 05.0 | Apply scientific principles to the health care field. – The student will be able to: | | |
| | 05.01 Identify the overall organization of the human body. | | |
| | 05.02 Describe the basic structure and function of the body systems of the human body. | | |
| | 05.03 Describe how the systems of the human body work together to maintain homeostasis. | | |
| | 05.04 Describe mechanisms of disease transmission, the Chain of Infection, prevention and standard precautions. | | |
| 06.0 | Perform basic health care skills. – The student will be able to: | | |
| | 06.01 Measure and record (graph) height and weight. | | |
| | 06.02 Measure and record temperature, pulse, blood pressure and respiration while recognizing the normal ranges for each. | | |
| | 06.03 Demonstrate medical aseptic technique by hand washing, gloving and application of personal protective equipment (PPE). | | |
| | 06.04 Demonstrate basic first aid skills (i.e. bleeding, fractures, and musculoskeletal emergencies). | | |
| | 06.05 Demonstrate Cardiopulmonary Resuscitation (CPR) and care for a choking victim. | | |
| | 06.06 Demonstrate basic skills used within the healthcare professions may include the following: 06.06.01 Visualizing X-rays | | |
| | 06.06.02 Conduct vision testing (Snellen chart, peripheral vision, color blindness) | | |
| | 06.06.03 Conduct basic hearing test | | |
| | 06.06.04 Measure respiratory capacity/output | | |
| | 06.06.05 Range-of-Motion exercises | | |
| 07.0 | 06.06.06 Conduct simulated ABO blood-typing | | |
| 07.0 | Demonstrate occupational safety skills related to the employer, employee, and the patient in the healthcare setting. – The student will be able to: | | |
| | 07.01 Recognize safety concerns related to the practice of health care. | | |
| | 07.02 Demonstrate safety habits that will prevent injury to health care workers, co-workers, and patients including proper use personal protective equipment (PPE) and infection control practices. | | |
| | 07.03 Identify poisons and hazardous materials to include the use and interpretation of a Safety Data Sheet (SDS) form. | | |

| CTE Standards and Benchmarks | | |
|------------------------------|---|--|
| 07.04 | Demonstrate an understanding for the importance of fire safety practices including prevention, evacuation plans (R.A.C.E.) and the use of a fire extinguisher (P.A.S.S.). | |
| 07.05 | Explore basic information on the dangers of blood borne diseases in healthcare including but not limited to HIV/AIDS and Hepatitis B. | |
| 07.06 | Perform proper body mechanics to prevent self and patient injuries. | |

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

The intended progression for the Health Science Middle School courses is Introduction to Health Science Career Pathways (8709350 & 8709360), Orientation to Health Science Professions (8400110) and Exploration of Health Science Professions (8400310 & 8400210). By offering the middle school courses in the intended progression, each course increases in complexity, rigor and skill level as appropriate.

Special projects that are related to each occupational cluster are provided, including role playing activities related to specific careers, visualizing xrays and crutch-walking, operating the microscope, and specific lab procedures. Team teaching and integration of the curriculum with English, Math and Science is encouraged.

Guest speakers from industry and related field trips make important contributions to the effectiveness of this course.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the intercurricular career and technical student organization 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.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. 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 (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their 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 and regulated secondary programs cannot be modified.

Florida Department of Education Curriculum Framework

| Course Title: | Orientation to Nursing |
|-----------------|--------------------------------|
| Course Type: | Orientation/Exploratory |
| Career Cluster: | Health Science |

| Secondary – Middle School | |
|---------------------------|--|
| Course Number | 8417106 |
| CIP Number | 0351260302 |
| Grade Level | 6-8 |
| Standard Length | Semester |
| Teacher Certification | Refer to the Course Structure section. |
| CTSO | HOSA: Future Health Professionals |

<u>Purpose</u>

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 the Health Science career cluster.

The content includes but is not limited to basic information about the skills required, available, career paths, specializations, financial rewards, occupational hazards, and educational requirements. Information concerning the practices for promoting good health is included.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

This program is a planned sequence of instruction consisting of 1 course.

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|------------------------|--|----------|
| 8417106 | Orientation to Nursing | REG NURSE 7 G PRAC NURSE @7 %7%G *(Must be a Registered Nurse) LPN 7 G | Semester |

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition.

<u>Standards</u>

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

- 01.0 Discuss the history of nursing.
- 02.0 Discuss personal qualities essential to nurses.
- 03.0 Demonstrate an awareness of various career pathways for nursing and occupations.
- 04.0 Identify skills performed by various levels of nursing occupations.
- 05.0 Identify life stages and the health care needs of each.
- 06.0 Demonstrate basic communication skills.
- 07.0 Perform basic mathematical calculations and demonstrate problem solving skills used by nurses.
- 08.0 Demonstrate an understanding of the principles of wellness and disease.
- 09.0 Identify the general plan of anatomy and physiology of the human body and perform nursing skills utilized for each system.
- 10.0 Discuss various job settings for nurses.
- 11.0 Demonstrate employability skills related to nursing.
- 12.0 Demonstrate how to take vital signs and analyze the results.
- 13.0 Perform a basic head to toe assessment & document the findings.

Florida Department of Education Student Performance Standards

Course Title:Orientation to NursingCourse Number:8417106Course Length:Semester

CTE Standards and Benchmarks

01.0 Discuss the history of nursing. -- The student will be able to:

01.01 Compare nursing care from ancient times to the present. For example: families, religious orders, wars, modern treatment and equipment.

01.02 Discuss early pioneers in nursing such as Clara Barton and Florence Nightingale.

01.03 Demonstrate knowledge of how advances in science have impacted beliefs and practices from ancient times to the present.

02.0 Discuss personal qualities essential to nurses. -- The student will be able to:

02.01 Describe the personal traits of an ideal nurse.

02.02 List their own personal traits that would assist them in nursing and those that would need to be improved or developed.

02.03 Discuss the importance of legal and ethical behaviors as related to nursing.

03.0 Demonstrate an awareness of various career pathways for nursing and occupations. -- The student will be able to:

03.01 Identify and classify what careers fall under the nursing service category and cluster (e.g. C.N.A.s, PCTs, LPNs, ADNs, diploma R.N.s, B.S.N.s, M.S.N.s, PhDs, and DNPs) and identify various pathways to reach these levels.

03.02 List various institutions where training for nursing careers is available.

03.03 Identify types of education and training levels as it relates to nursing services/occupations.

03.04 List the advantages and disadvantages of one occupation including the following factors: job opportunities, salary ranges, fringe benefits, working conditions, and occupational hazards.

04.0 Identify skills performed by various levels of nursing occupations. -- The student will be able to:

04.01 Identify representative skills of nursing assistants and home health aides.

04.02 Identify representative skills of patient care technicians.

04.03 Identify representative skills of practical nurses.

| | 04.04 Identify representative skills of professional nurses. |
|------|---|
| | 04.05 Identify representative skills of nursing specialties. |
| 05.0 | Identify life stages and the health care needs of each The student will be able to: |
| | 05.01 Describe common health care needs from birth to death and identify how nurses help address those needs. |
| | 05.02 Identify how nurses promote optimum health. |
| | 05.03 Identify how cultural diversity/transcultural nursing affects health care needs at different life stages. |
| 06.0 | Demonstrate basic communication skills The student will be able to: |
| | 06.01 Demonstrate interpersonal communication skills such as active listening, verbal, non-verbal and written language. |
| | 06.02 Demonstrate the ability to break medical terms into their word parts. |
| | 06.03 Discuss common abbreviations and symbols used in nursing. |
| | 06.04 Identify technology used in Nursing and the proper communication etiquette required for its' use. |
| 07.0 | Perform basic mathematical calculations and demonstrate problem solving skills used by nurses The student will be able to: |
| | 07.01 Describe the importance of why accurate calculations and effective problem solving skills are required. |
| | 07.02 Calculate mathematical problems and measurements related to nursing. |
| | 07.03 Measure artificial medication in various forms, for example syringes or medicine cups. |
| | 07.04 Convert common weights, measure, and volumes to metric as applied in the health care setting. |
| | 07.05 Accurately tell time using both standard and international/military time formats. |
| 08.0 | Demonstrate an understanding of the principles of wellness and disease. – The student will be able to: |
| | 08.01 Describe how cultural and individual differences in lifestyles relate to wellness and quality of life and how these differences imp health problems of society. |
| | 08.02 Demonstrate an understanding of the risk factors that contribute to illness. |
| | 08.03 Identify consequences of substance abuse and high risk factors. |
| | 08.04 Describe strategies for prevention of diseases including health screenings and examinations. |

| | 08 05 | Explain basic concepts of positive self-image, body and mental wellness and the effect stress has on both. |
|------|-------|---|
| | | |
| | 08.06 | Explore the need for proper nutrition and water intake to maintain wellness. |
|)9.0 | | y the general plan of anatomy and physiology of the human body and perform nursing skills utilized for each system The t will be able to: |
| | 09.01 | Describe the anatomical position of the body, defining basic body planes and directional terms. |
| | 09.02 | Describe the anatomy and physiology of the respiratory system. |
| | | 09.02.01 Describe illnesses/diseases related to the respiratory system. |
| | | 09.02.02 Perform a basic assessment of respiratory rate and lung sounds. |
| | 09.03 | Describe the anatomy and physiology of the integumentary system. |
| | | 09.03.01 Describe illnesses/diseases related to the integumentary system. |
| | | 09.03.02 Identify the various wounds related to the skin and their treatment. |
| | 09.04 | Describe the anatomy and physiology of the skeletal system. |
| | | 09.04.01 Describe illnesses/diseases of the skeletal system. |
| | | 09.04.02 Identify types of fractures and splint/sling techniques. |
| | 09.05 | Describe the anatomy and physiology of the muscle system. |
| | | 09.05.01 Describe illnesses/diseases of the muscular system. |
| | | 09.05.02 Perform ROM exercises. |
| | 09.06 | Describe the anatomy and physiology of the digestive system. |
| | | 09.06.01 Describe illnesses/diseases related to the digestive system. |
| | | 09.06.02 Assess bowel sounds. |
| | 09.07 | Describe the anatomy and physiology of the ear. |
| | | 09.07.01 Describe illnesses/diseases related to the ear. |
| | | 09.07.02 Perform the Rhinnes and Weber hearing test with a tuning fork. If available, test hearing with an audiometer. |
| | 09.08 | Describe the anatomy and physiology of the eye. |
| | | 09.08.01 Describe illnesses/diseases related to the eye. |
| | | 09.08.02 Perform a vision exam using a Snellen eye chart |
| | 09.09 | Describe the anatomy and physiology of the nervous system. |
| | | 09.09.01 Describe illnesses/diseases related to the nervous system. |
| | | 09.09.02 Perform a reflex exam using a reflex hammer. |
| | 09.10 | Describe the anatomy and physiology of the circulatory system, including the heart. |
| | | 09.10.01 Describe illnesses/diseases related to the circulatory system. |
| | | 09.10.02 Demonstrate how to take a blood pressure. |
| | 09.11 | Describe the anatomy and physiology of the excretory system. |
| | | 09.11.01 Describe illnesses/diseases related to the excretory system. |
| | | 09.11.02 Measure input & output. |
| | 09.12 | Describe the anatomy and physiology of the immune system. |
| | | 09.12.01 Describe the illnesses/disease related to the immune system. |

| CIES | | s and Bench 09.12.02 | Perform hand washing, |
|------|---------|-------------------------|---|
| | | 09.12.03 09.12.04 | Demonstrate the operation of a microscope Demonstrate the streaking of an agar plate. |
| 10.0 | Discuss | s various job s | settings for nurses The student will be able to: |
| | 10.01 | Recognize va | arious settings that employ nurses. |
| | 10.02 | Compare sala | aries and benefits of various levels of nursing and various employment settings. |
| | 10.03 | Discuss pros | and cons of nursing jobs in various settings. |
| 11.0 | Demon | strate employ | ability skills related to nursing. – The student will be able to: |
| | 11.01 | Identify skills | needed for employment as a nurse. |
| | 11.02 | At a minimum | n, demonstrate the skills used within nursing from the following list: |
| | | 11.02.01 | Basic First Aid and CPR. |
| | | 11.02.02 | Patient menu planning and feeding techniques. |
| | | 11.02.03 | Measure and record temperature, pulse and respiration (TPR). |
| | | 11.02.04 | Use of wheelchairs, crutches and/or walkers. |
| | | 11.02.05 | Perform a weight, height and BMI assessment. |
| | | 11.02.06 | Graph the development of infant/child on a growth chart. |
| | | 11.02.07 | Correctly perform making an occupied and unoccupied bed. |
| 12.0 | Demon | strate how to | take vital signs and analyze the results. – The student will be able to: |
| | 12.01 | Demonstrate | how to take an oral, temporal, axillary and tympanic temperature and analyze the results. |
| | 12.02 | Demonstrate | how to take a radial, carotid and apical pulse and analyze the results. |
| | 12.03 | Demonstrate | how to take respiration and analyze the results. |
| | 12.04 | Demonstrate | how to take a blood pressure and analyze the results. |
| 13.0 | Perform | n a basic head | d to toe assessment & document the findings. – The student will be able to: |
| | 13.01 | Perform a ba | sic head to toe assessment and document the findings using correct terminology. |

CTE Standards and Benchmarks

13.02 Demonstrate how to take a health history.

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

The purpose of this course is to acquaint students with career opportunities and job requirements in the field of nursing which will enable students to consider career objectives and interests.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Special projects that are related to nursing are provided, including role playing activities of daily living as a handicapped individual, developing an emergency evacuation plan for their own home, menu planning and feeding techniques, applying slings, use of wheelchairs, and creating their own nursing career plan. Team teaching and integration of the curriculum with English, Math and Science is encouraged.

Guest speakers from industry make an important contribution to the effectiveness of this course.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the intercurricular career and technical student organization 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.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. 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 (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their 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 and regulated secondary programs cannot be modified.

Florida Department of Education Curriculum Framework

Course Title:Introduction to Health Science Career PathwaysCourse Type:Orientation/ExploratoryCareer Cluster:Health Science

| Secondary – Middle School | |
|---------------------------|--|
| Course Number | 8709350 |
| CIP Number | 148709350M |
| Grade Level | 6-8 |
| Standard Length | Semester |
| Teacher Certification | Refer to the Course Structure section. |
| CTSO | HOSA: Future Health Professionals |

<u>Purpose</u>

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 the Health Science career cluster.

The content includes but is not limited to a broad overview of the Health Science career cluster, including terminology, careers, history, required skills, and technologies associated with each pathway in the Health Science career cluster.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Course Structure

This program is a planned sequence of instruction consisting of 1 course.

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|--|-----------------------|----------|
| 8709350 | Introduction to Health Science Career Pathways | ANY HEALTH OCCUP G * | Semester |

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills.

For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Standards

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

- 01.0 Demonstrate an understanding of the Therapeutic Services career pathway.
- 02.0 Demonstrate an understanding of the Diagnostic Services career pathway.
- 03.0 Demonstrate an understanding of the Health Informatics career pathway.
- 04.0 Demonstrate an understanding of the Support Services career pathway.
- 05.0 Demonstrate an understanding of the Biotechnology Research and Development career pathway.
- 06.0 Apply leadership and communication skills.

Florida Department of Education Student Performance Standards

Course Title:Introduction to Health Science Career PathwaysCourse Number:8709350Course Length:Semester

Course Description:

Beginning with a broad overview of the Health Science career cluster, students are introduced to the terminology, careers, history, required skills, and technologies associated with each pathway in the Health Science career cluster. Additionally, they will be provided with opportunities to acquire and demonstrate beginning leadership skills.

| CTE S | Standards and Benchmarks |
|-------|--|
| 01.0 | Demonstrate an understanding of the Therapeutic Services career pathway The student will be able to: |
| | 01.01 Define and use proper terminology associated with the Therapeutic Services career pathway. |
| | 01.02 Explore a variety of careers in the Therapeutic Services career pathway, including educational requirements and salary expectations, such as EMS; Nursing; Dentistry; Pharmacy; Sports Medicine. |
| | 01.03 Identify common characteristics of the careers in the Therapeutic Services pathway. |
| | 01.04 Identify skills and equipment used in Therapeutic Service careers. |
| | 01.05 Perform lab activities that are relevant to each career that is being explored. |
| 02.0 | Demonstrate an understanding of the Diagnostic Services career pathway The student will be able to: |
| | 02.01 Define and use proper terminology associated with the Diagnostic Services career pathway. |
| | 02.02 Explore a variety of careers in the Diagnostic Services career pathway. Suggested careers to focus on: Medical Laboratory Services; Radiology; Ophthalmology. |
| | 02.03 Identify common characteristics of the careers in the Diagnostic Services career pathway. |
| | 02.04 Identify skills required to successfully enter any career in the Diagnostic Services career pathway. |
| | 02.05 Perform lab activities related to careers being explored for example blood glucose testing, blood typing, and vision testing. |
| 03.0 | Demonstrate an understanding of the Health Informatics career pathway The student will be able to: |
| | 03.01 Define and use proper terminology associated with the Health Informatics career pathway. |

| CTE S | Standards and Benchmarks |
|-------|---|
| | 03.02 Explore a variety of careers in the Health Informatics career pathway. |
| | 03.03 Explore the careers available in the Health Informatics; Medical Coding/Biller; Medical Office Administration |
| | 03.04 Identify common characteristics of the careers in the Health Informatics career pathway. |
| | 03.05 Identify skills required to successfully enter any career in the Health Informatics career pathway. |
| | 03.06 Perform activities related to health informatics careers such as evaluating medical records or bills, office reception and support. |
| 04.0 | Demonstrate an understanding of the Support Services career pathway The student will be able to: |
| | 04.01 Define and use proper terminology associated with the Support Services career pathway. |
| | 04.02 Explore a variety of careers in the Support Services career pathway. Suggested careers: dietary services;; central supply ; social services ; environmental services |
| | 04.03 Identify common characteristics of the careers in the Support Services career pathway. |
| | 04.04 Identify skills required to successfully enter any career in the Support Services career pathway. |
| | 04.05 Perform lab skills related to covered careers such as diet plan design and housekeeping skills. |
| 05.0 | Demonstrate an understanding of the Biotechnology Research and Development career pathway The student will be able to: |
| | 05.01 Define and use proper terminology associated with the Biotechnology Research and Development career pathway. |
| | 05.02 Explore a variety of careers in the Biotechnology Research and Development career pathway. Suggested careers: Biomedical Engineering and Biomedical Research. |
| | 05.03 Identify skills required to successfully enter any career in the Biotechnology Research and Development career pathway. |
| | 05.04 Perform lab skills related to covered career, for example: microbiology labs; investigating antisepsis procedures; DNA extraction lab. |
| | 05.05 Explore the role of research in medical advancements and discoveries that promote wellness for example development of vaccines and discovery of the structure of DNA. |
| 06.0 | Apply leadership and communication skills The student will be able to: |
| | 06.01 Increase awareness of leadership opportunities through professional organizations such as Career Technical Student Organizations (CTSOs). |
| | 06.02 Identify the characteristics of effective leadership. |
| | 06.03 Demonstrate effective communication skills. |
| | 06.04 Demonstrate an understanding of how information technology is used in health care. |
| | |

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

The intended progression for the Health Science Middle School courses is Introduction to Health Science Career Pathways (8709350 & 8709360), Orientation to Health Science Professions (8400110) and Exploration of Health Science Professions (8400310 & 8400210). By offering the middle school courses in the intended progression, each course increases in complexity, rigor and skill level as appropriate.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the intercurricular career and technical student organization 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.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. 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 (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their 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 and regulated secondary programs cannot be modified.

Florida Department of Education Curriculum Framework

Course Title:Introduction to Health Science Career Pathways and Career Planning*Course Type:Orientation/Exploratory and Career PlanningCareer Cluster:Health Science

| Secondary – Middle School | |
|---------------------------|--|
| Course Number | 8709360 |
| CIP Number | 148709360M |
| Grade Level | 6-8 |
| Standard Length | Semester |
| Teacher Certification | Refer to the Course Structure section. |
| CTSO | HOSA: Future Health Professionals |

*Effective July 1, 2017, there is no longer a promotion requirement for middle grades students to complete a Career and Education Planning course. However, these courses will continue to be available and should be taught integrating the eight career and education planning course standards. The MyCareerShines powered by Kuder® career planning system is available free of charge to all Florida middle and high schools to assist students in exploring career options and developing an academic and career plan.

Purpose

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 the Health Science career cluster.

The content includes but is not limited to a broad overview of the Health Science career cluster, including terminology, careers, history, required skills, and technologies associated with each pathway in the Health Science career cluster.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

This program is a planned sequence of instruction consisting of 1 course.

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|---|-----------------------|----------|
| 8709360 | Introduction to Health Science Career Pathways and Career Planning | ANY HEALTH OCCUP G * | Semester |

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition.

Standards

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

- 01.0 Demonstrate an understanding of the Therapeutic Services career pathway.
- 02.0 Demonstrate an understanding of the Diagnostic Services career pathway.
- 03.0 Demonstrate an understanding of the Health Informatics career pathway.
- 04.0 Demonstrate an understanding of the Support Services career pathway.
- 05.0 Demonstrate an understanding of the Biotechnology Research and Development career pathway.
- 06.0 Apply leadership and communication skills.

Listed below are the standards that must be met to satisfy the requirements of Section 1003.4156, Florida Statutes.

- 07.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.
- 08.0 Develop skills to locate, evaluate, and interpret career information.
- 09.0 Identify and demonstrate processes for making short and long term goals.
- 10.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship.
- 11.0 Understand the relationship between educational achievement and career choices/postsecondary options.
- 12.0 Identify a career cluster and related pathways through an interest assessment that match career and education goals.
- 13.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.
- 14.0 Demonstrate knowledge of technology and its application in career fields/clusters.

Florida Department of Education Student Performance Standards

Course Title:Introduction to Health Science Career Pathways and Career PlanningCourse Number:8709360Course Length:Semester

Course Description:

Beginning with a broad overview of the Health Science career cluster, students are introduced to the terminology, careers, history, required skills, and technologies associated with each pathway in the Health Science career cluster. Additionally, they will be provided with opportunities to acquire and demonstrate beginning leadership skills.

| CTE S | Standards and Benchmarks |
|-------|--|
| 01.0 | Demonstrate an understanding of the Therapeutic Services career pathway The student will be able to: |
| | 01.01 Define and use proper terminology associated with the Therapeutic Services career pathway. |
| | 01.02 Explore a variety of careers in the Therapeutic Services career pathway, including educational requirements and salary expectations, such as EMS; Nursing; Dentistry; Pharmacy; Sports Medicine. |
| | 01.03 Identify common characteristics of the careers in the Therapeutic Services pathway. |
| | 01.04 Identify skills and equipment used in Therapeutic Service careers. |
| | 01.05 Perform lab activities that are relevant to each career that is being explored. |
| 02.0 | Demonstrate an understanding of the Diagnostic Services career pathway The student will be able to: |
| | 02.01 Define and use proper terminology associated with the Diagnostic Services career pathway. |
| | 02.02 Explore a variety of careers in the Diagnostic Services career pathway. Suggested careers to focus on: Medical Laboratory Services; Radiology; Ophthalmology. |
| | 02.03 Identify common characteristics of the careers in the Diagnostic Services career pathway. |
| | 02.04 Identify skills required to successfully enter any career in the Diagnostic Services career pathway. |
| | 02.05 Perform lab activities related to careers being explored for example blood glucose testing, blood typing, and vision testing. |
| 03.0 | Demonstrate an understanding of the Health Informatics career pathway The student will be able to: |
| | 03.01 Define and use proper terminology associated with the Health Informatics career pathway. |

| | 03.02 Explore a variety of careers in the Health Informatics career pathway. |
|------|--|
| | 03.03 Explore the careers available in the Health Informatics; Medical Coding/Biller; Medical Office Administration. |
| | 03.04 Identify common characteristics of the careers in the Health Informatics career pathway. |
| | 03.05 Identify skills required to successfully enter any career in the Health Informatics career pathway. |
| | 03.06 Perform activities related to health informatics careers such as evaluating medical records or bills, office reception and support. |
| 04.0 | Demonstrate an understanding of the Support Services career pathway The student will be able to: |
| | 04.01 Define and use proper terminology associated with the Support Services career pathway. |
| | 04.02 Explore a variety of careers in the Support Services career pathway. Suggested careers: dietary services; central supply; social services; environmental services. |
| | 04.03 Identify common characteristics of the careers in the Support Services career pathway. |
| | 04.04 Identify skills required to successfully enter any career in the Support Services career pathway. |
| | 04.05 Perform lab skills related to covered careers such as diet plan design and housekeeping skills. |
| 05.0 | Demonstrate an understanding of the Biotechnology Research and Development career pathway The student will be able to: |
| | 05.01 Define and use proper terminology associated with the Biotechnology Research and Development career pathway. |
| | 05.02 Explore a variety of careers in the Biotechnology Research and Development career pathway. Suggested careers: Biomedical Engineering and Biomedical Research. |
| | 05.03 Identify skills required to successfully enter any career in the Biotechnology Research and Development career pathway. |
| | 05.04 Perform lab skills related to covered career, for example: microbiology labs; investigating antisepsis procedures; DNA extraction la |
| | 05.05 Explore the role of research in medical advancements and discoveries that promote wellness for example development of vaccine and discovery of the structure of DNA. |
| 06.0 | Apply leadership and communication skills The student will be able to: |
| | 06.01 Increase awareness of leadership opportunities through professional organizations such as Career Technical Student Organization (CTSOs). |
| | 06.02 Identify the characteristics of effective leadership. |
| | 06.03 Demonstrate effective communication skills. |
| | 06.04 Demonstrate an understanding of how information technology is used in health care. |

| Listee | below are the standards that must be met to satisfy the requirements of Section 1003.4156, Florida Statutes. |
|--------|---|
| The s | tudent will be able to: |
| 07.0 | Describe the influences that societal, economic, and technological changes have on employment trends and future training. |
| 08.0 | Develop skills to locate, evaluate, and interpret career information. |
| 09.0 | Identify and demonstrate processes for making short and long term goals. |
| 10.0 | Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship. |
| 11.0 | Understand the relationship between educational achievement and career choices/postsecondary options. |
| 12.0 | Identify a career cluster and related pathways through an interest assessment that match career and education goals. |
| 13.0 | Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals. |
| 14.0 | Demonstrate knowledge of technology and its application in career fields/clusters. |

Additional Information

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

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

The intended progression for the Health Science Middle School courses is Introduction to Health Science Career Pathways (8709350 & 8709360), Orientation to Health Science Professions (8400110) and Exploration of Health Science Professions (8400310 & 8400210). By offering the middle school courses in the intended progression, each course increases in complexity, rigor and skill level as appropriate.

Career and Technical Student Organization (CTSO)

HOSA: Future Health Professionals is the intercurricular career and technical student organization 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.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. 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 (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their 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 and regulated secondary programs cannot be modified.

Florida Department of Education Curriculum Framework

Course Title:Orientation to Career ClustersCourse Type:Orientation/Exploratory

| | Secondary – Middle School | |
|-----------------------|--|--|
| Course Number | 8000400 | |
| CIP Number | 1498999907 | |
| Grade Level | 6 – 8 | |
| Standard Length | Semester | |
| Teacher Certification | Refer to the Course Structure section. | |
| CTSO | Any CTSO as appropriate | |

Purpose

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 the seventeen career clusters. This course is a compilation of modules for each of the seventeen career clusters and is designed to provide flexibility in course offerings. Any number of modules can be selected to comprise a course that meets the needs of the students.

The content includes, but is not limited to, the orientation of students to career pathways in the career and technical education field. Reinforcement of academic skills occurs through classroom instruction and applied laboratory procedures. This course is recommended for students in the sixth grade, but not required.

Instruction and learning activities are provided in a laboratory setting using hands-on experiences with the equipment, materials and technology appropriate to the course content and in accordance with current practices.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Course Structure

The length of this course is one semester. It may be offered for two semesters when appropriate. When offered for one semester, it is recommended that it be at the exploratory level and more in-depth when offered for two semesters.

To teach the course(s) listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the course structure:

| Course Number | Course Title | Teacher Certification | Length |
|---------------|--------------------------------|-----------------------|----------|
| 8000400 | Orientation to Career Clusters | ANY FIELD | Semester |

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.SI.1.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition.

Standards

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

- 01.0 Identify Florida's seventeen career clusters.
- 02.0 Identify and explore careers in the Agriculture, Food & Natural Resources cluster.
- 03.0 Identify and explore careers in the Architecture & Construction cluster.
- 04.0 Identify and explore careers in the Arts, A/V Technology & Communication cluster.
- 05.0 Identify and explore careers in the Business Management & Administration cluster.
- 06.0 Identify and explore careers in the Education & Training cluster.
- 07.0 Identify and explore careers in the Energy cluster.
- 08.0 Identify and explore careers in the Finance cluster.
- 09.0 Identify and explore careers in the Government & Public Administration cluster.
- 10.0 Identify and explore careers in the Health Science cluster.
- 11.0 Identify and explore careers in the Hospitality and Tourism cluster.
- 12.0 Identify and explore careers in the Human Services cluster.
- 13.0 Identify and explore careers in the Information Technology cluster.
- 14.0 Identify and explore careers in the Law, Public Safety & Security cluster.
- 15.0 Identify and explore careers in the Manufacturing cluster.
- 16.0 Identify and explore careers in the Marketing, Sales & Service cluster.
- 17.0 Identify and explore careers in the Engineering and Technology Education cluster.
- 18.0 Identify and explore careers in the Transportation, Distribution & Logistics cluster.
- 19.0 Describe leadership skills.

Florida Department of Education Student Performance Standards

| Course Title: | Orientation to Career Clusters |
|----------------|---------------------------------------|
| Course Number: | 8000400 |
| Course Credit: | Semester |

Course Description:

This course is a broad overview of the seventeen career clusters offered in Florida. This course provides hands-on introductory activities for each career cluster as well as opportunities to acquire and demonstrate beginning leadership skills.

| CTES | Standards and Benchmarks |
|------|---|
| 01.0 | Identify Florida's seventeen career clusters – the student will be able to: |
| | 01.01 List Florida's seventeen career clusters. |
| | 01.02 Research the national career clusters website. |
| | 01.03 Identify the Career and Technical Student Organizations (CTSO) appropriate for Career and Technical Education (CTE) programs. |
| | 01.04 Explain the purpose of a CTSO. |
| 02.0 | Identify and explore careers in the Agriculture, Food & Natural Resources cluster – the student will be able to: |
| | 02.01 Identify the pathways in the Agriculture, Food & Natural Resources career cluster and the careers in each pathway. |
| | 02.02 Describe the types of places that employ individuals who have careers in the Agriculture, Food & Natural Resources career cluster. |
| | 02.03 Describe the variety of tasks performed by individuals who have careers in the Agriculture, Food & Natural Resources career cluster. |
| | 02.04 List the skills, abilities, and talents needed for careers in the Agriculture, Food & Natural Resources career cluster. |
| | 02.05 Identify the level of training and education required for careers in the Agriculture, Food & Natural Resources career cluster. |
| | 02.06 Research a career in the Agriculture, Food & Natural Resources career cluster and present findings to the class. |
| | 02.07 Apply math, science, and reading skills in the completion of a project or activity related to the Agriculture, Food & Natural Resources career cluster. |
| 03.0 | Identify and explore careers in the Architecture & Construction cluster – the student will be able to: |
| | 03.01 Identify the pathways in the Architecture & Construction career cluster and the careers in each pathway. |

| GIES | Standards and Benchmarks |
|------|--|
| | 03.02 Describe the types of places that employ individuals who have careers in the Architecture & Construction career cluster. |
| | 03.03 Describe the variety of tasks performed by individuals who have careers in the Architecture & Construction career cluster. |
| | 03.04 List the skills, abilities, and talents needed for careers in the Architecture & Construction career cluster. |
| | 03.05 Identify the level of training and education required for careers in the Architecture & Construction career cluster. |
| | 03.06 Research a career in the Architecture & Construction career cluster and present findings to the class. |
| | 03.07 Apply math, science, and reading skills in the completion of a project or activity related to the Architecture & Construction career cluster. |
| 04.0 | Identify and explore careers in the Arts, A/V Technology & Communication cluster – the student will be able to: |
| | 04.01 Identify the pathways in the Arts, A/V Technology & Communication career cluster and the careers in each pathway. |
| | 04.02 Describe the types of places that employ individuals who have careers in the Arts, A/V Technology & Communication career cluster |
| | 04.03 Describe the variety of tasks performed by individuals who have careers in the Arts, A/V Technology & Communication career cluster. |
| | 04.04 List the skills, abilities, and talents needed for careers in the Arts, A/V Technology & Communication career cluster. |
| | 04.05 Identify the level of training and education required for careers in the Arts, A/V Technology & Communication career cluster. |
| | 04.06 Research a career in the Arts, A/V Technology & Communication career cluster and present findings to the class. |
| | 04.07 Apply math, science, and reading skills in the completion of a project or activity related to the Arts, A/V Technology & Communication career cluster. |
| 05.0 | Identify and explore careers in the Business, Management & Administration cluster – the student will be able to: |
| | 05.01 Identify the pathways in the Business, Management & Administration career cluster and the careers in each pathway. |
| | 05.02 Describe the types of places that employ individuals who have careers in the Business Management & Administration career cluster. |
| | 05.03 Describe the variety of tasks performed by individuals who have careers in the Business Management & Administration career cluster. |
| | 05.04 List the skills, abilities, and talents needed for careers in the Business Management & Administration career cluster. |
| | 05.05 Identify the level of training and education required for careers in the Business Management & Administration career cluster. |
| | 05.06 Research a career in the Business Management & Administration career cluster and present findings to the class. |
| | 05.07 Apply math, science, and reading skills in the completion of a project or activity related to the Business Management & Administration career cluster. |

CTE Standards and Benchmarks

06.0 Identify and explore careers in the Education & Training cluster – the student will be able to:

06.01 Identify the pathways in the Education & Training career cluster and the careers in each pathway.

06.02 Describe the types of places that employ individuals who have careers in the Education & Training career cluster.

06.03 Describe the variety of tasks performed by individuals who have careers in the Education & Training career cluster.

06.04 List the skills, abilities, and talents needed for careers in the Education & Training career cluster.

06.05 Identify the level of training and education required for careers in the Education & Training career cluster.

06.06 Research a career in the Education & Training career cluster and present findings to the class.

06.07 Apply math, science, and reading skills in the completion of a project or activity related to the Education & Training career cluster.

07.0 Identify and explore careers in the Energy cluster – the student will be able to:

07.01 Identify the pathways in the Energy career cluster and the careers in each pathway.

07.02 Describe the types of places that employ individuals who have careers in the Energy career cluster.

07.03 Describe the variety of tasks performed by individuals who have careers in the Energy career cluster.

07.04 List the skills, abilities, and talents needed for careers in the Energy career cluster.

07.05 Identify the level of training and education required for careers in the Energy career cluster.

07.06 Research a career in the Energy career cluster and present findings to the class.

07.07 Apply math, science, and reading skills in the completion of a project or activity related to the Energy career cluster.

08.0 Identify and explore careers in the Finance cluster – the student will be able to:

08.01 Identify the pathways in the Finance career cluster and the careers in each pathway.

08.02 Describe the types of places that employ individuals who have careers in the Finance career cluster.

08.03 Describe the variety of tasks performed by individuals who have careers in the Finance career cluster.

08.04 List the skills, abilities, and talents needed for careers in the Finance career cluster.

08.05 Identify the level of training and education required for careers in the Finance career cluster.

08.06 Research a career in the Finance career cluster and present findings to the class.

| CTE S | tandards and Benchmarks |
|-------|--|
| | 08.07 Apply math, science, and reading skills in the completion of a project or activity related to the Finance career cluster. |
| 0.0 | Identify and explore careers in the Government & Public Administration cluster – the student will be able to: |
| | 09.01 Identify the pathways in the Government & Public Administration career cluster and the careers in each pathway. |
| | 09.02 Describe the types of places that employ individuals who have careers in the Government & Public Administration career cluster. |
| | 09.03 Describe the variety of tasks performed by individuals who have careers in the Government & Public Administration career cluster |
| | 09.04 List the skills, abilities, and talents needed for careers in the Government & Public Administration career cluster. |
| | 09.05 Identify the level of training and education required for careers in the Government & Public Administration career cluster. |
| | 09.06 Research a career in the Government & Public Administration career cluster and present findings to the class. |
| | 09.07 Apply math, science, and reading skills in the completion of a project or activity related to the Government & Public Administration career cluster. |
| 10.0 | Identify and explore careers in the Health Science cluster – the student will be able to: |
| | 10.01 Identify the pathways in the Health Science career cluster and the careers in each pathway. |
| | 10.02 Describe the types of places that employ individuals who have careers in the Health Science career cluster. |
| | 10.03 Describe the variety of tasks performed by individuals who have careers in the Health Science career cluster. |
| | 10.04 List the skills, abilities, and talents needed for careers in the Health Science career cluster. |
| | 10.05 Identify the level of training and education required for careers in the Health Science career cluster. |
| | 10.06 Research a career in the Health Science career cluster and present findings to the class. |
| | 10.07 Apply math, science, and reading skills in the completion of a project or activity related to the Health Science career cluster. |
| 11.0 | Identify and explore careers in the Hospitality & Tourism cluster – the student will be able to: |
| | 11.01 Identify the pathways in the Hospitality & Tourism career cluster and the careers in each pathway. |
| | 11.02 Describe the types of places that employ individuals who have careers in the Hospitality & Tourism career cluster. |
| | 11.03 Describe the variety of tasks performed by individuals who have careers in the Hospitality & Tourism career cluster. |
| | 11.04 List the skills, abilities, and talents needed for careers in the Hospitality & Tourism career cluster. |
| | 11.05 Identify the level of training and education required for careers in the Hospitality & Tourism career cluster. |

| | 11.06 Research a career in the Hospitality & Tourism career cluster and present findings to the class. |
|-----|---|
| | 11.07 Apply math, science, and reading skills in the completion of a project or activity related to the Hospitality & Tourism career cluster. |
| 2.0 | Identify and explore careers in the Human Services cluster – the student will be able to: |
| | 12.01 Identify the pathways in the Human Services career cluster and the careers in each pathway. |
| | 12.02 Describe the types of places that employ individuals who have careers in the Human Services career cluster. |
| | 12.03 Describe the variety of tasks performed by individuals who have careers in the Human Services career cluster. |
| | 12.04 List the skills, abilities, and talents needed for careers in the Human Services career cluster. |
| | 12.05 Identify the level of training and education required for careers in the Human Services career cluster. |
| | 12.06 Research a career in the Human Services career cluster and present findings to the class. |
| | 12.07 Apply math, science, and reading skills in the completion of a project or activity related to the Human Services career cluster. |
| 3.0 | Identify and explore careers in the Information Technology cluster – the student will be able to: |
| | 13.01 Identify the pathways in the Information Technology career cluster and the careers in each pathway. |
| | 13.02 Describe the types of places that employ individuals who have careers in the Information Technology career cluster. |
| | 13.03 Describe the variety of tasks performed by individuals who have careers in the Information Technology career cluster. |
| | 13.04 List the skills, abilities, and talents needed for careers in the Information Technology career cluster. |
| | 13.05 Identify the level of training and education required for careers in the Information Technology career cluster. |
| | 13.06 Research a career in the Information Technology career cluster and present findings to the class. |
| | 13.07 Apply math, science, and reading skills in the completion of a project or activity related to the Information Technology career clust |

14.01 Identify the pathways in the Law, Public Safety & Security career cluster and the careers in each pathway.

14.02 Describe the types of places that employ individuals who have careers in the Law, Public Safety & Security career cluster.

14.03 Describe the variety of tasks performed by individuals who have careers in the Law, Public Safety & Security career cluster.

14.04 List the skills, abilities, and talents needed for careers in the Law, Public Safety & Security career cluster.

| CTE Standards and Benchmarks | | |
|------------------------------|---|--|
| | 14.05 Identify the level of training and education required for careers in the Law, Public Safety & Security career cluster. | |
| | 14.06 Research a career in the Law, Public Safety & Security career cluster and present findings to the class. | |
| | 14.07 Apply math, science, and reading skills in the completion of a project or activity related to the Law, Public Safety & Security career cluster. | |
| 15.0 | Identify and explore careers in the Manufacturing cluster – the student will be able to: | |
| | 15.01 Identify the pathways in the Manufacturing career cluster and the careers in each pathway. | |
| | 15.02 Describe the types of places that employ individuals who have careers in the Manufacturing career cluster. | |
| | 15.03 Describe the variety of tasks performed by individuals who have careers in the Manufacturing career cluster. | |
| | 15.04 List the skills, abilities, and talents needed for careers in the Manufacturing career cluster. | |
| | 15.05 Identify the level of training and education required for careers in the Manufacturing career cluster. | |
| | 15.06 Research a career in the Manufacturing career cluster and present findings to the class. | |
| | 15.07 Apply math, science, and reading skills in the completion of a project or activity related to the Manufacturing career cluster. | |
| 16.0 | Identify and explore careers in the Marketing, Sales & Service cluster – the student will be able to: | |
| | 16.01 Identify the pathways in the Marketing, Sales & Service career cluster and the careers in each pathway. | |
| | 16.02 Describe the types of places that employ individuals who have careers in the Marketing, Sales & Service career cluster. | |
| | 16.03 Describe the variety of tasks performed by individuals who have careers in the Marketing, Sales & Service career cluster. | |
| | 16.04 List the skills, abilities, and talents needed for careers in the Marketing, Sales & Service career cluster. | |
| | 16.05 Identify the level of training and education required for careers in the Marketing, Sales & Service career cluster. | |
| | 16.06 Research a career in the Marketing, Sales & Service career cluster and present findings to the class. | |
| | 16.07 Apply math, science, and reading skills in the completion of a project or activity related to the Marketing, Sales & Service career cluster. | |
| 17.0 | Identify and explore careers in Engineering and Technology Education – the student will be able to: | |
| | 17.01 Identify the pathways in Engineering and Technology Education. | |
| | 17.02 Describe the types of places that employ individuals who have careers in Engineering and Technology Education. | |
| | 17.03 Describe the variety of tasks performed by individuals who have careers in Engineering and Technology Education. | |

| CTE S | Standards and Benchmarks |
|-------|--|
| | 17.04 List the skills, abilities, and talents needed for careers in Engineering and Technology Education. |
| | 17.05 Identify the level of training and education required for careers in Engineering and Technology Education. |
| | 17.06 Research a career in Engineering and Technology Education and present findings to the class. |
| | 17.07 Apply math, science, and reading skills in the completion of a project or activity related to the Engineering and Technology Education. |
| 18.0 | Identify and explore careers in the Transportation & Logistics cluster – the student will be able to: |
| | 18.01 Identify the pathways in the Transportation & Logistics career cluster and the careers in each pathway. |
| | 18.02 Describe the types of places that employ individuals who have careers in the Transportation & Logistics career cluster. |
| | 18.03 Describe the variety of tasks performed by individuals who have careers in the Transportation & Logistics career cluster. |
| | 18.04 List the skills, abilities, and talents needed for careers in the Transportation & Logistics career cluster. |
| | 18.05 Identify the level of training and education required for careers in the Transportation & Logistics career cluster. |
| | 18.06 Research a career in the Transportation & Logistics career cluster and present findings to the class. |
| | 18.07 Apply math, science, and reading skills in the completion of a project or activity related to the Transportation & Logistics career cluster. |
| 19.0 | Describe leadership skills – the student will be able to: |
| | 19.01 Identify the Career and Technical Student Organization(s) that are appropriate for CTE programs in each of the career clusters. |
| | 19.02 Describe the leadership opportunities available to members of the CTSOs identified above. |
| | 19.03 Investigate the CTSOs at your school and/or in your school district (e.g., membership requirements, dues, activities, events). |
| | |

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Special Notes

MyCareerShines is an interactive resource to assist students in identifying their ideal career and to enhance preparation for employment. Teachers are encouraged to integrate this resource into the program curriculum to meet the employability goals for each student.

Career and Technical Student Organization (CTSO)

The Florida Technology Student Association (FL-TSA) is the intercurricular 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.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (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 counselor and/or instructors. 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 (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their 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 and regulated secondary programs cannot be modified.