# Course: M/J Band 3 and Career Planning-1302142

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3992.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Band 3 and Career Planning |
| **Course Number:** | 1302142 |
| **Course Abbreviated Title:** | M/J BAND 3&CAR PLAN |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Instrumental Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with previous band experience expand on their instrumental technique, music literacy, and aesthetic response through rehearsal, performance, and study of a variety of intermediate-level, high-quality band literature. Instrumentalists extend their knowledge of music notation and theory, sound production, and rehearsal strategies. In tandem with their learning opportunities in band, students investigate careers in a wide variety of fields guided by the competencies required by Florida Statute. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |
| **General Notes:** | **Career and Education Planning** - Per section 1003.4156, Florida |

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| | Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize the importance of entrepreneurship skills; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.<br><br>1.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br>2.0 Develop skills to locate, evaluate, and interpret career information.<br>3.0 Identify and demonstrate processes for making short and long term goals.<br>4.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship.<br>5.0 Understand the relationship between educational achievement and career choices/postsecondary options.<br>6.0 Identify a career cluster and related pathways through an interest assessment that match career and education goals.<br>7.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.<br>8.0 Demonstrate knowledge of technology and its application in career fields/clusters. |

## STANDARDS (28)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the |

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| | soundness of the reasoning and the relevance and sufficiency of the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.7.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, |

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| | problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.C.3 The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts.**

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| **MU.68.C.3.1 :** | Apply specific criteria to evaluate why a musical work is an exemplar in a specific style or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts. |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process. |

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| | Remarks/Examples |
| | e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |
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**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples |
| | e.g., scales; key signatures; relative major/minor; parallel major/minor |
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**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples |
| | e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
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| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, |

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| | tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |

# Course: M/J United States History- 2100010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4229.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J United States History |
| **Course Number:** | 2100010 |
| **Course Abbreviated Title:** | M/J US HIST |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Social Studies **SubSubject:** American and Western Hemispheric Histories |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Primary content emphasis for this course pertains to the study of American history from the Exploration and Colonization period to the Reconstruction Period following the Civil War. Students will be exposed to the historical, geographic, political, economic, and sociological events which influenced the development of the United States and the resulting impact on world history. So that students can clearly see the relationship between cause and effect in historical events, students should have the opportunity to explore those fundamental ideas and events which occurred after Reconstruction.<br><br>**Mathematics Benchmark Guidance** - Instruction of U.S. History should include opportunities for students to interpret and create representations of historical events using mathematical tables, charts, and graphs.<br><br>**Special Notes:**<br>Additional content that may be contained in the NAEP Grade 8 United States History assessment includes material from all time periods on the following |

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| | topics:<br><br>• Change and Continuity in American Democracy: Ideas, Institutions, Events, Key Figures, and Controversies<br>• The Gathering and Interactions of Peoples, Cultures, and Ideas<br>• Economic and Technological Changes and Their Relationship to Society, Ideas, and the Environment<br>• The Changing Role of America in the World<br><br>The NAEP frameworks for United States History may be accessed at http://www.nagb.org/content/nagb/assets/documents/publications/frameworks/historyframework.pdf<br><br>**Instructional Practices**<br><br>Teaching from well-written, grade-level instructional materials enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

## STANDARDS (108)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.5.1 Use appropriate tools strategically.

- MACC.K12.MP.6.1 Attend to precision.

**MACC.6.SP Statistics and Probability**

MACC.6.SP.1 Summarize and describe distributions.

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| **HE.8.C.2.4:** | Critique school and public health policies that influence health promotion and disease prevention.<br>Remarks/Examples<br>Speed-limit laws, immunization requirements, universal precautions, zero tolerance, report bullying, and cell phone/texting laws. |
| **LACC.68.RH.1.1:** | Cite specific textual evidence to support analysis of primary and secondary sources. |
| **LACC.68.RH.1.2:** | Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions. |
| **LACC.68.RH.1.3:** | Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered). |
| **LACC.68.RH.2.4:** | Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies. |
| **LACC.68.RH.2.5:** | Describe how a text presents information (e.g., sequentially, comparatively, causally). |
| **LACC.68.RH.2.6:** | Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts). |
| **LACC.68.RH.3.7:** | Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts. |
| **LACC.68.RH.3.8:** | Distinguish among fact, opinion, and reasoned judgment in a text. |
| **LACC.68.RH.3.9:** | Analyze the relationship between a primary and secondary source on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. |

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| | b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **SS.8.A.2.4:** | Identify the impact of key colonial figures on the economic, political, and social development of the colonies.<br>Remarks/Examples<br>Examples may include, but are not limited to, John Smith, William Penn, Roger Williams, Anne Hutchinson, John Winthrop, Jonathan Edwards, William Bradford, Nathaniel Bacon, John Peter Zenger, and Lord Calvert. |
| **SS.8.A.2.5:** | Discuss the impact of colonial settlement on Native American populations.<br>Remarks/Examples<br>Examples may include, but are not limited to, war, disease, loss of land, westward displacement of tribes causing increased conflict between tribes, and dependence on trade for Western goods, including guns. |
| **SS.8.A.2.6:** | Examine the causes, course, and consequences of the French and Indian War.<br>Remarks/Examples<br>Examples may include, but are not limited to, ongoing conflict between France and England, territorial disputes, trade competition, Ft. Duquesne, Ft. Quebec, Treaty of Paris, heavy British debt. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. |

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| | a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.68.WHST.3.7:** | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |

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| **LACC.68.WHST.4.10:** | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| **SS.8.A.2.1:** | Compare the relationships among the British, French, Spanish, and Dutch in their struggle for colonization of North America.<br>Remarks/Examples<br>This benchmark implies a study of the ways that economic, political, cultural, and religious competition between these Atlantic powers shaped early colonial America. |
| **SS.8.A.2.2:** | Compare the characteristics of the New England, Middle, and Southern colonies.<br>Remarks/Examples<br>Examples may include, but are not limited to, colonial governments, geographic influences, occupations, religion, education, settlement patterns, and social patterns. |
| **SS.8.A.2.3:** | Differentiate economic systems of New England, Middle and Southern colonies including indentured servants and slaves as labor sources.<br>Remarks/Examples<br>Examples may include, but are not limited to, subsistence farming, cash crop farming, and maritime industries. |
| **LACC.8.SL.1.1:** | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas. |

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| | d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| **LACC.8.SL.1.2:** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. |
| **LACC.8.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| **LACC.8.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **SS.8.A.1.1:** | Provide supporting details for an answer from text, interview for oral history, check validity of information from research/text, and identify strong vs. weak arguments.<br>Remarks/Examples<br>Students should be encouraged to utilize FINDS (Focus, Investigage, Note, Develop, Score), Florida's research process model accessible at: http://www.fldoe.org/bii/Library_Media/pdf/12TotalFINDS.pdf. |
| **SS.8.A.1.2:** | Analyze charts, graphs, maps, photographs and timelines; analyze political cartoons; determine cause and effect. |
| **SS.8.A.1.3:** | Analyze current events relevant to American History topics through a variety of electronic and print media resources.<br>Remarks/Examples<br>Examples may include, but are not limited to, articles, editorials, journals, periodicals, reports, websites, videos, and podcasts. |
| **SS.8.A.1.4:** | Differentiate fact from opinion, utilize appropriate historical research and fiction/nonfiction support materials. |
| **SS.8.A.1.5:** | Identify, within both primary and secondary sources, the author, audience, format, and purpose of significant historical documents. |
| **SS.8.A.1.6:** | Compare interpretations of key events and issues throughout American History. |

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| | Remarks/Examples<br>Examples may include, but are not limited to, historiography. |
| SS.8.A.1.7: | View historic events through the eyes of those who were there as shown in their art, writings, music, and artifacts. |
| SS.8.A.2.7: | Describe the contributions of key groups (Africans, Native Americans, women, and children) to the society and culture of colonial America. |
| SS.8.A.3.1: | Explain the consequences of the French and Indian War in British policies for the American colonies from 1763 - 1774.<br>Remarks/Examples<br>Examples may include, but are not limited to, Proclamation of 1763, Sugar Act, Quartering Act, Stamp Act, Declaratory Act, Townshend Acts, Tea Act, Quebec Act, and Coercive Acts. |
| SS.8.A.3.10: | Examine the course and consequences of the Constitutional Convention (New Jersey Plan, Virginia Plan, Great Compromise, Three-Fifths Compromise, compromises regarding taxation and slave trade, Electoral College, state vs. federal power, empowering a president). |
| SS.8.A.3.11: | Analyze support and opposition (Federalists, Federalist Papers, AntiFederalists, Bill of Rights) to ratification of the U.S. Constitution. |
| SS.8.A.3.12: | Examine the influences of George Washington's presidency in the formation of the new nation.<br>Remarks/Examples<br>Examples may include, but are not limited to, personal motivations, military experience, political influence, establishing Washington, D.C. as the nation's capital, rise of the party system, setting of precedents (e.g., the Cabinet), Farewell Address. |
| SS.8.A.3.13: | Explain major domestic and international economic, military, political, and socio-cultural events of John Adams's presidency.<br>Remarks/Examples<br>Examples may include, but aren ot limited to, XYZ Affairs, Alien and Sedition Acts, Land Act of 1800, the quasi-war, the Midnight Judges. |
| SS.8.A.3.14: | Explain major domestic and international economic, military, political, and socio-cultural events of Thomas Jefferson's presidency. |

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| | Remarks/Examples<br>Examples may include, but are not limited to, Election of 1800, birth of political parties, Marbury v. Madison, judicial review, Jefferson's First Inaugural Address, Judiciary Act of 1801, Louisiana Purchase, Barbary War, Lewis and Clark Expedition, Hamilton and Burr conflict/duel, Embargo of 1807. |
| **SS.8.A.3.15:** | Examine this time period (1763-1815) from the perspective of historically under-represented groups (children, indentured servants, Native Americans, slaves, women, working class). |
| **SS.8.A.3.16:** | Examine key events in Florida history as each impacts this era of American history.<br>Remarks/Examples<br>Examples may include, but are not limited to, Treaty of Paris, British rule, Second Spanish Period. |
| **SS.8.A.3.2:** | Explain American colonial reaction to British policy from 1763 - 1774.<br>Remarks/Examples<br>Examples may include, but are not limited to, written protests, boycotts, unrest leading to the Boston Massacre, Boston Tea Party, First Continental Congress, Stamp Act Congress, Committees of Correspondence. |
| **SS.8.A.3.3:** | Recognize the contributions of the Founding Fathers (John Adams, Sam Adams, Benjamin Franklin, John Hancock, Alexander Hamilton, Thomas Jefferson, James Madison, George Mason, George Washington) during American Revolutionary efforts.<br>Remarks/Examples<br>Examples may also include, but are not limited to, Thomas Paine, John Jay, Peter Salem. |
| **SS.8.A.3.4:** | Examine the contributions of influential groups to both the American and British war efforts during the American Revolutionary War and their effects on the outcome of the war.<br>Remarks/Examples<br>Examples may include, but are not limited to, foreign alliances, freedmen, Native Americans, slaves, women, soldiers, Hessians. |

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| SS.8.A.3.5: | Describe the influence of individuals on social and political developments during the Revolutionary era.<br>Remarks/Examples<br>Examples may include, but are not limited to, James Otis, Mercy Otis Warren, Abigail Adams, Benjamin Banneker, Lemuel Haynes, Phyllis Wheatley. |
| SS.8.A.3.6: | Examine the causes, course, and consequences of the American Revolution.<br>Remarks/Examples<br>Examples may include, but are not limited to, Battles of Lexington and Concord, Common Sense, Second Continental Congress, Battle of Bunker Hill, Battle of Cowpens, Battle of Trenton, Olive Branch Petition, Declaration of Independence, winter at Valley Forge, Battles of Saratoga and Yorktown, Treaty of Paris. |
| SS.8.A.3.7: | Examine the structure, content, and consequences of the Declaration of Independence. |
| SS.8.A.3.8: | Examine individuals and groups that affected political and social motivations during the American Revolution.<br>Remarks/Examples<br>Examples may include, but are not limited to, Ethan Allen and the Green Mountain Boys, the Committees of Correspondence, Sons of Liberty, Daughters of Liberty, the Black Regiment (in churches), Patrick Henry, Patriots, Loyalists, individual colonial militias, and undecideds. |
| SS.8.A.3.9: | Evaluate the structure, strengths, and weaknesses of the Articles of Confederation and its aspects that led to the Constitutional Convention. |
| SS.8.A.4.1: | Examine the causes, course, and consequences of United States westward expansion and its growing diplomatic assertiveness (War of 1812, Convention of 1818, Adams-Onis Treaty, Missouri Compromise, Monroe Doctrine, Trail of Tears, Texas annexation, Manifest Destiny, Oregon Territory, Mexican American War/Mexican Cession, California Gold Rush, Compromise of 1850, Kansas Nebraska Act, Gadsden Purchase). |
| SS.8.A.4.10: | Analyze the impact of technological advancements on the |

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| | agricultural economy and slave labor.<br>Remarks/Examples |
| | Examples may include, but are not limited to, cotton gin, steel plow, rapid growth of slave trade. |
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| **SS.8.A.4.11:** | Examine the aspects of slave culture including plantation life, resistance efforts, and the role of the slaves' spiritual system. |
| **SS.8.A.4.12:** | Examine the effects of the 1804 Haitian Revolution on the United States acquisition of the Louisiana Territory. |
| **SS.8.A.4.13:** | Explain the consequences of landmark Supreme Court decisions (McCulloch v. Maryland [1819], Gibbons v. Odgen [1824], Cherokee Nation v. Georgia [1831], and Worcester v. Georgia [1832]) significant to this era of American history. |
| **SS.8.A.4.14:** | Examine the causes, course, and consequences of the women's suffrage movement (1848 Seneca Falls Convention, Declaration of Sentiments). |
| **SS.8.A.4.15:** | Examine the causes, course, and consequences of literature movements (Transcendentalism) significant to this era of American history. |
| **SS.8.A.4.16:** | Identify key ideas and influences of Jacksonian democracy.<br>Remarks/Examples |
| | Examples may include, but are not limited to, political participation, political parties, constitutional government, spoils system, National Bank veto, Maysville Road veto, tariff battles, Indian Removal Act, nullification crisis. |
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| **SS.8.A.4.17:** | Examine key events and peoples in Florida history as each impacts this era of American history.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Andrew Jackson's military expeditions to end Indian uprisings, developing relationships between the Seminole and runaway slaves, Adams-Onis Treaty, Florida becoming a United States territory, combining former East and West Floridas, establishing first state capital, Florida's constitution, Florida's admittance to the Union as 27th state. |
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| SS.8.A.4.18: | Examine the experiences and perspectives of different ethnic, national, and religious groups in Florida, explaining their contributions to Florida's and America's society and culture during the Territorial Period.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Osceola, white settlers, U.S. troops, Black Seminoles, southern plantation and slave owners, Seminole Wars, Treaty of Moultrie Creek, Seminole relocation, Chief Billy Bowlegs, Florida Crackers. |
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| SS.8.A.4.2: | Describe the debate surrounding the spread of slavery into western territories and Florida.<br>Remarks/Examples |
| | Examples may include, but are not limited to, abolitionist movement, Ft. Mose, Missouri Compromise, Bleeding Kansas, Kansas-Nebraska Act, Compromise of 1850. |
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| SS.8.A.4.3: | Examine the experiences and perspectives of significant individuals and groups during this era of American History.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Lewis and Clark, Sacajawea, York, Pike, Native Americans, Buffalo Soldiers, Mexicanos, Chinese immigrants, Irish immigrants, children, slaves, women, Alexis de Tocqueville, political parties. |
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| SS.8.A.4.4: | Discuss the impact of westward expansion on cultural practices and migration patterns of Native American and African slave populations. |
| SS.8.A.4.5: | Explain the causes, course, and consequences of the 19th century transportation revolution on the growth of the nation's economy.<br>Remarks/Examples |
| | Examples may include, but are not limited to, roads, canals, bridges, steamboats, railroads. |
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| SS.8.A.4.6: | Identify technological improvements (inventions/inventors) that contributed to industrial growth.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Fitch/steamboat, Slater/textile mill machinery, Whitney/cotton gin, interchangeable |

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| | parts, McCoy/industrial lubrication, Fulton/commercial steamboat, Lowell/ mechanized cotton mill, Isaac Singer/sewing machine. |
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| **SS.8.A.4.7:** | Explain the causes, course, and consequences (industrial growth, subsequent effect on children and women) of New England's textile industry. |
| **SS.8.A.4.8:** | Describe the influence of individuals on social and political developments of this era in American History.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Daniel Boone, Tecumseh, Black Hawk, John Marshall, James Madison, Dolly Madison, Andrew Jackson, John C. Calhoun, Henry Clay, Daniel Webster, James Polk, Susan B. Anthony, Elizabeth Cady Stanton, William Lloyd Garrison, Frederick Douglass, Horace Mann, Dorothea Dix, Lucretia Mott, Sojourner Truth, Harriet Tubman. |
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| **SS.8.A.4.9:** | Analyze the causes, course and consequences of the Second Great Awakening on social reform movements.<br>Remarks/Examples |
| | Examples may include, but are not limited to, abolition, women's rights, temperance, education, prison and mental health reform, Charles Grandison Finney, the Beecher family. |
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| **SS.8.A.5.1:** | Explain the causes, course, and consequence of the Civil War (sectionalism, slavery, states' rights, balance of power in the Senate). |
| **SS.8.A.5.2:** | Analyze the role of slavery in the development of sectional conflict.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Abolition Movement, Nat Turner's Rebellion, Black Codes, Missouri Compromise, Compromise of 1850, Uncle Tom's Cabin, Kansas-Nebraska Act, Dred Scott v. Sandford, Lincoln-Douglas Debates, raid on Harper's Ferry, Underground Railroad, Presidential Election of 1860, Southern secession. |
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| **SS.8.A.5.3:** | Explain major domestic and international economic, military, political, and socio-cultural events of Abraham Lincoln's presidency.<br>Remarks/Examples |
| | Examples may include, but aren ot limited to, sectionalism, states' |

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| | rights, slavery, Civil War, attempts at foreign alliances, Emancipation Proclamation, Gettysburg Address, suspension of habeas corpus, First and Second Inaugural Addresses. |
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| **SS.8.A.5.4:** | Identify the division (Confederate and Union States, Border states, western territories) of the United States at the outbreak of the Civil War. |
| **SS.8.A.5.5:** | Compare Union and Confederate strengths and weaknesses.<br>Remarks/Examples |
| | Examples may include, but aren ot limited to, technology, resources, alliances, geography, military leaders-Lincoln, Davis, Grant, Lee, Jackson, Sherman. |
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| **SS.8.A.5.6:** | Compare significant Civil War battles and events and their effects on civilian populations.<br>Remarks/Examples |
| | Examples may include, but are not limited to, Fort Sumter, Bull Run, Monitor v. Merrimack, Antietam, Vicksburg, Gettysburg, Emancipation Proclamation, Sherman's March, Lee's surrender at Appomattox. |
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| **SS.8.A.5.7:** | Examine key events and peoples in Florida history as each impacts this era of American history.<br>Remarks/Examples |
| | Examples may include, but are not limited to, slavery, influential planters, Florida's secession and Confederate membership, women, children, pioneer environment, Union occupation, Battle of Olustee and role of 54th Massachusetts regiment, Battle at Natural Bridge. |
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| **SS.8.A.5.8:** | Explain and evaluate the policies, practices, and consequences of Reconstruction (presidential and congressional reconstruction, Johnson's impeachment, Civil Rights Act of 1866, the 13th, 14th, and 15th Amendments, opposition of Southern whites to Reconstruction, accomplishments and failures of Radical Reconstruction, presidential election of 1876, end of Reconstruction, rise of Jim Crow laws, rise of Ku Klux Klan). |
| **SS.8.C.1.1:** | Identify the constitutional provisions for establishing citizenship. |

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| SS.8.C.1.2: | Compare views of self-government and the rights and responsibilities of citizens held by Patriots, Loyalists, and other colonists. |
| SS.8.C.1.3: | Recognize the role of civic virtue in the lives of citizens and leaders from the colonial period through Reconstruction. |
| SS.8.C.1.4: | Identify the evolving forms of civic and political participation from the colonial period through Reconstruction. |
| SS.8.C.1.5: | Apply the rights and principles contained in the Constitution and Bill of Rights to the lives of citizens today. |
| SS.8.C.1.6: | Evaluate how amendments to the Constitution have expanded voting rights from our nation's early history to present day. |
| SS.8.C.2.1: | Evaluate and compare the essential ideals and principles of American constitutional government expressed in primary sources from the colonial period to Reconstruction. |
| SS.8.E.1.1: | Examine motivating economic factors that influenced the development of the United States economy over time including scarcity, supply and demand, opportunity costs, incentives, profits, and entrepreneurial aspects.<br>Remarks/Examples<br>Examples areTriangular Trade, colonial development - New England, Middle, and Southern colonies - Revolutionary War, Manifest Destiny, compromises over slavery issues, the Civil War, Reconstruction. |
| SS.8.E.2.1: | Analyze contributions of entrepreneurs, inventors, and other key individuals from various gender, social, and ethnic backgrounds in the development of the United States economy. |
| SS.8.E.2.2: | Explain the economic impact of government policies.<br>Remarks/Examples<br>Examples are mercantilism, colonial establishment, Articles of Confederation, Constitution, compromises over slavery. |
| SS.8.E.2.3: | Assess the role of Africans and other minority groups in the economic development of the United States. |
| SS.8.E.3.1: | Evaluate domestic and international interdependence.<br>Remarks/Examples<br>Examples are triangular trade routes and regional exchange of |

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| | resources. |
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| SS.8.G.1.1: | Use maps to explain physical and cultural attributes of major regions throughout American history. |
| SS.8.G.1.2: | Use appropriate geographic tools and terms to identify and describe significant places and regions in American history. |
| SS.8.G.2.1: | Identify the physical elements and the human elements that define and differentiate regions as relevant to American history.<br>Remarks/Examples |
| | Examples of physical elements are climate, terrain, resources. Examples of human elements are religion, government, economy, language, demography. |
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| SS.8.G.2.2: | Use geographic terms and tools to analyze case studies of regional issues in different parts of the United States that have had critical economic, physical, or political ramifications.<br>Remarks/Examples |
| | Examples are cataclysmic natural disasters, shipwrecks. |
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| SS.8.G.2.3: | Use geographic terms and tools to analyze case studies of how selected regions of the United States have changed over time. |
| SS.8.G.3.1: | Locate and describe in geographic terms the major ecosystems of the United States. |
| SS.8.G.3.2: | Use geographic terms and tools to explain differing perspectives on the use of renewable and non-renewable resources in the United States and Florida over time. |
| SS.8.G.4.1: | Interpret population growth and other demographic data for any given place in the United States throughout its history. |
| SS.8.G.4.2: | Use geographic terms and tools to analyze the effects throughout American history of migration to and within the United States, both on the place of origin and destination. |
| SS.8.G.4.3: | Use geographic terms and tools to explain cultural diffusion throughout the United States as it expanded its territory. |
| SS.8.G.4.4: | Interpret databases, case studies, and maps to describe the role that regions play in influencing trade, migration patterns, and cultural/political interaction in the United States throughout time. |

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| **SS.8.G.4.5:** | Use geographic terms and tools to analyze case studies of the development, growth, and changing nature of cities and urban centers in the United States over time. |
| **SS.8.G.4.6:** | Use political maps to describe changes in boundaries and governance throughout American history. |
| **SS.8.G.5.1:** | Describe human dependence on the physical environment and natural resources to satisfy basic needs in local environments in the United States. |
| **SS.8.G.5.2:** | Describe the impact of human modifications on the physical environment and ecosystems of the United States throughout history.<br>Remarks/Examples<br>Examples are deforestation, urbanization, agriculture. |
| **SS.8.G.6.1:** | Use appropriate maps and other graphic representations to analyze geographic problems and changes over time throughout American history. |
| **SS.8.G.6.2:** | Illustrate places and events in U.S. history through the use of narratives and graphic representations.<br>Remarks/Examples<br>Examples are maps, graphs, tables. |

# Course: M/J Physical Science, Advanced-2003020

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4262.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Physical Science, Advanced |
| **Course Number:** | 2003020 |
| **Course Abbreviated Title:** | M/J PHY SCI ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Physical Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

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| | measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br><br>Instructional Practices<br><br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (83)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

**Use grade appropriate Nature of Science benchmarks** (i.e. if this course is offered to seventh grade students, then the SC.7.N benchmarks should be integrated into the course content, and SC.6.N and SC.8.N benchmarks should be omitted from the seventh grade course).

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| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.RST.4.10:** | By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence. |

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| | d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **SC.6.P.11.1:** | Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa. |
| **SC.6.P.12.1:** | Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, |

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| | or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| MACC.8.G.3.9: | Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.<br><br>Remarks/Examples<br>**Fluency Expectations or Examples of Culminating Standards**<br><br>When students learn to solve problems involving volumes of cones, cylinders, and spheres — together with their previous grade 7 work in angle measure, area, surface area and volume (7.G.2.4–2.6) — they will have acquired a well-developed set of geometric measurement skills. These skills, along with proportional reasoning (7.RP) and multistep numerical problem solving (7.EE.2.3), can be combined and used in flexible ways as part of modeling during high school — not to mention after high school for college and careers. |
| LACC.8.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly. |

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| | a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.<br>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| **LACC.8.SL.1.2:** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. |
| **LACC.8.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| **LACC.8.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.8.SL.2.5:** | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |
| **MACC.7.SP.2.4:** | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| **MACC.7.SP.3.5:** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |

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| **MACC.8.F.2.5:** | Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. |
| **SC.6.P.13.1:** | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |
| **SC.6.P.13.2:** | Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are. |
| **SC.6.P.13.3:** | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. Remarks/Examples<br><br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.2:** | Differentiate replication (by others) from repetition (multiple trials). |
| **SC.7.N.1.3:** | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |

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| **SC.7.N.1.7:** | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| **SC.7.N.2.1:** | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| **SC.7.N.3.1:** | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| **SC.7.N.3.2:** | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.7.P.10.1:** | Illustrate that the sun's energy arrives as radiation with a wide range of wavelengths, including infrared, visible, and ultraviolet, and that white light is made up of a spectrum of many different colors. |
| **SC.7.P.10.2:** | Observe and explain that light can be reflected, refracted, and/or absorbed. |
| **SC.7.P.10.3:** | Recognize that light waves, sound waves, and other waves move at different speeds in different materials. |
| **SC.7.P.11.1:** | Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state. |
| **SC.7.P.11.2:** | Investigate and describe the transformation of energy from one form to another. |
| **SC.7.P.11.3:** | Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another. |
| **SC.7.P.11.4:** | Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature. |
| **SC.8.N.1.1:** | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| **SC.8.N.1.2:** | Design and conduct a study using repeated trials and replication. |

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| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect |

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| | science, and vice versa. |
| **SC.8.P.8.1:** | Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.<br>Remarks/Examples<br>Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.2:** | Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass. |
| **SC.8.P.8.3:** | Explore and describe the densities of various materials through measurement of their masses and volumes.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.4:** | Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.5:** | Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.<br>Remarks/Examples |

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| | Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions. |
| **SC.8.P.8.6:** | Recognize that elements are grouped in the periodic table according to similarities of their properties. |
| **SC.8.P.8.7:** | Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.8:** | Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts. |
| **SC.8.P.8.9:** | Distinguish among mixtures (including solutions) and pure substances.<br>Remarks/Examples<br>Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions). Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes. |
| **SC.8.P.9.1:** | Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes. |
| **SC.8.P.9.2:** | Differentiate between physical changes and chemical changes. |
| **SC.8.P.9.3:** | Investigate and describe how temperature influences chemical changes. |
| **SC.912.P.10.1:** | Differentiate among the various forms of energy and recognize that they can be transformed from one form to others.<br>Remarks/Examples<br>Differentiate between kinetic and potential energy. Recognize that energy cannot be created or destroyed, only transformed. Identify examples of transformation of energy: Heat to light in incandescent electric light bulbs; |

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| | Light to heat in laser drills; Electrical to sound in radios; Sound to electrical in microphones; Electrical to chemical in battery rechargers; Chemical to electrical in dry cells; Mechanical to electrical in generators [power plants]; Nuclear to heat in nuclear reactors; Gravitational potential energy of a falling object is converted to kinetic energy then to heat and sound energy when the object hits the ground. |
| **SC.912.P.10.4:** | Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter. |
| **SC.912.P.10.5:** | Relate temperature to the average molecular kinetic energy.<br>Remarks/Examples |
| | Recognize that the internal energy of an object includes the energy of random motion of the object's atoms and molecules, often referred to as thermal energy. |
| **SC.912.P.8.1:** | Differentiate among the four states of matter.<br>Remarks/Examples |
| | Differentiate among the four states of matter (solid, liquid, gas and plasma) in terms of energy, particle motion, and phase transitions. (Note: Currently five states of matter have been identified.) |
| **SC.912.P.8.11:** | Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH.<br>Remarks/Examples |
| | Use experimental data to illustrate and explain the pH scale to characterize acid and base solutions. Compare and contrast the strengths of various common acids and bases. |
| **SC.912.P.8.2:** | Differentiate between physical and chemical properties and physical and chemical changes of matter.<br>Remarks/Examples |
| | Discuss volume, compressibility, density, conductivity, malleability, reactivity, molecular composition, freezing, melting and boiling points. Describe simple laboratory techniques that can be used to separate homogeneous and heterogeneous mixtures (e.g. filtration, distillation, chromatography, evaporation). |
| **SC.912.P.8.4:** | Explore the scientific theory of atoms (also known as atomic theory) |

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| | by describing the structure of atoms in terms of protons, neutrons and electrons, and differentiate among these particles in terms of their mass, electrical charges and locations within the atom.<br>Remarks/Examples |
| | Explain that electrons, protons and neutrons are parts of the atom and that the nuclei of atoms are composed of protons and neutrons, which experience forces of attraction and repulsion consistent with their charges and masses.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
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| **SC.912.P.8.5:** | Relate properties of atoms and their position in the periodic table to the arrangement of their electrons.<br>Remarks/Examples |
| | Use the periodic table and electron configuration to determine an element's number of valence electrons and its chemical and physical properties. Explain how chemical properties depend almost entirely on the configuration of the outer electron shell. |
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| **SC.912.P.8.7:** | Interpret formula representations of molecules and compounds in terms of composition and structure.<br>Remarks/Examples |
| | Write chemical formulas for simple covalent (HCl, $SO_2$, $CO_2$, and $CH_4$), ionic ($Na^+ + Cl^- \rightarrow NaCl$) and molecular ($O_2$, $H_2O$) compounds. Predict the formulas of ionic compounds based on the number of valence electrons and the charges on the ions. |
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## RELATED GLOSSARY TERM DEFINITIONS (62)

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| **Acid:** | A substance that increases the $H^+$ concentration when added to a water solution Acids turn blue litmus paper red, have a pH of less than 7, and their aqueous solutions react with bases and certain metals to form salts. |

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| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Attraction :** | A term used to describe the electric or magnetic force exerted by oppositely charged objects or to describe the gravitational force that pulls objects toward each other. |
| **Base:** | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| **Boil:** | To change from a liquid to a vapor by the application of heat. |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chemical change:** | A reaction or a change in a substance produced by chemical means that results in producing a different chemical. |
| **Compound:** | A substance made up of at least two different elements held together by chemical bonds that can only be broken down into elements by chemical processes. |
| **Concentration:** | The relative amount of a particular substance, a solute, or mixture. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Conductivity:** | The ability or power to conduct or transmit heat, electricity, or sound. |
| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Electron:** | A stable elementary particle in the lepton family having a mass at rest of 9.107 × 10^-28 grams and an electric charge of approximately -1.602 × 10^-19 coulombs. Electrons orbit about the positively charged nuclei of atoms in distinct orbitals of different energy levels, called shells. |
| **Energy:** | The capacity to do work. |

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| **Evaporation:** | The process by which a liquid is converted to its vapor phase by heating the liquid. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Freeze:** | To pass from the liquid to the solid state by loss of heat from the substance/system. |
| **Gas:** | One of the fundamental states of matter in which the molecules do not have a fixed volume or shape. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Infrared :** | Relating to the invisible part of the electromagnetic spectrum with wavelengths longer than those of visible red light but shorter than those of microwaves. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |

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| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Melt:** | To be changed from a solid to a liquid state especially by the application of heat. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Neutron:** | A subatomic particle having zero charge, found in the nucleus of an atom. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Periodic table:** | A tabular arrangement of the elements according to their atomic numbers so that elements with similar properties are in the same column. |
| **Physical change :** | A change of a substance from one form to another without a change in its chemical properties. |
| **Potential energy:** | Energy stored in a physical system due to the object's configuration and position. |
| **Proton:** | A subatomic particle having a positive charge and which is found in the nucleus of an atom. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which |

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| | genetic material is copied in cells. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Solubility:** | The ability or tendency of one substance to dissolve in another at a given temperature and pressure. |
| **Sound wave:** | Longitudinal pressure waves in any material medium regardless of whether they constitute audible sound; earthquake waves and ultrasonic waves are sometimes called sound waves. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Ultraviolet :** | Relating to electromagnetic radiation having frequencies higher than those of visible light but lower than those of x-rays, approximately 1015 -1016 hertz. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Volume:** | A measure of the amount of space an object takes up; also the loudness of a sound or signal. |
| **Wavelength:** | The distance between crests of a wave. |
| **Weight:** | The force with which a body is attracted to Earth or another celestial body, equal to the product of the object's mass and the acceleration of gravity. |

# Course: M/J Physical Science- 2003010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4247.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Physical Science |
| **Course Number:** | 2003010 |
| **Course Abbreviated Title:** | M/J PHY SCI |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Physical Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007). |

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| | **Special Notes:**<br><br>Instructional Practices: Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (87)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

**Use grade appropriate Nature of Science benchmarks** (i.e. if this course is offered to seventh grade students, then the SC.7.N benchmarks should be integrated into the course content, and SC.6.N and SC.8.N benchmarks should be omitted from the seventh grade course).

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| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |

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| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.RST.4.10:** | By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from |

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| | and supports the argument presented. |
| **MACC.8.G.3.9:** | Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.<br><br>Remarks/Examples<br>**Fluency Expectations or Examples of Culminating Standards**<br><br>When students learn to solve problems involving volumes of cones, cylinders, and spheres — together with their previous grade 7 work in angle measure, area, surface area and volume (7.G.2.4–2.6) — they will have acquired a well-developed set of geometric measurement skills. These skills, along with proportional reasoning (7.RP) and multistep numerical problem solving (7.EE.2.3), can be combined and used in flexible ways as part of modeling during high school — not to mention after high school for college and careers. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and |

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| | audience. |
| LACC.68.WHST.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| MACC.8.F.2.5: | Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. |
| SC.8.N.1.5: | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| LACC.8.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions and decision-making, |

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| | track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.<br>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| **LACC.8.SL.1.2:** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. |
| **LACC.8.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| **LACC.8.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.8.SL.2.5:** | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. |
| **MACC.7.SP.2.4:** | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences |

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| | about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| **MACC.7.SP.3.5:** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| **SC.6.N.1.1:** | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.6.N.1.2:** | Explain why scientific investigations should be replicable. |
| **SC.6.N.1.3:** | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007). |
| **SC.6.N.1.4:** | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| **SC.6.N.1.5:** | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, |

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| | LACC.68.WHST.3.9. |
| **SC.6.N.2.1:** | Distinguish science from other activities involving thought.<br>Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |
| **SC.6.N.2.2:** | Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered. |
| **SC.6.N.2.3:** | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| **SC.6.N.3.1:** | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| **SC.6.N.3.2:** | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| **SC.6.N.3.3:** | Give several examples of scientific laws. |
| **SC.6.N.3.4:** | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.6.P.11.1:** | Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa. |
| **SC.6.P.12.1:** | Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |

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| SC.6.P.13.1: | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |
| SC.6.P.13.2: | Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are. |
| SC.6.P.13.3: | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| SC.7.N.1.1: | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| SC.7.N.1.2: | Differentiate replication (by others) from repetition (multiple trials). |
| SC.7.N.1.3: | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| SC.7.N.1.4: | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| SC.7.N.1.5: | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| SC.7.N.1.6: | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |
| SC.7.N.1.7: | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| SC.7.N.2.1: | Identify an instance from the history of science in which scientific |

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| | knowledge has changed when new evidence or new interpretations are encountered. |
| SC.7.N.3.1: | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| SC.7.N.3.2: | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.7.P.10.1: | Illustrate that the sun's energy arrives as radiation with a wide range of wavelengths, including infrared, visible, and ultraviolet, and that white light is made up of a spectrum of many different colors. |
| SC.7.P.10.2: | Observe and explain that light can be reflected, refracted, and/or absorbed. |
| SC.7.P.10.3: | Recognize that light waves, sound waves, and other waves move at different speeds in different materials. |
| SC.7.P.11.1: | Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state. |
| SC.7.P.11.2: | Investigate and describe the transformation of energy from one form to another. |
| SC.7.P.11.3: | Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another. |
| SC.7.P.11.4: | Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature. |
| SC.8.N.1.1: | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| SC.8.N.1.2: | Design and conduct a study using repeated trials and replication. |
| SC.8.N.1.3: | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |

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| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect science, and vice versa. |
| **SC.8.P.8.1:** | Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.<br>Remarks/Examples |

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| | Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.2:** | Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass. |
| **SC.8.P.8.3:** | Explore and describe the densities of various materials through measurement of their masses and volumes.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.4:** | Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.5:** | Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.<br>Remarks/Examples<br>Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions. |

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| SC.8.P.8.6: | Recognize that elements are grouped in the periodic table according to similarities of their properties. |
| SC.8.P.8.7: | Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.P.8.8: | Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts. |
| SC.8.P.8.9: | Distinguish among mixtures (including solutions) and pure substances.<br>Remarks/Examples<br>Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions). Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes. |
| SC.8.P.9.1: | Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes. |
| SC.8.P.9.2: | Differentiate between physical changes and chemical changes. |
| SC.8.P.9.3: | Investigate and describe how temperature influences chemical changes. |

## RELATED GLOSSARY TERM DEFINITIONS (57)

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| **Acid:** | A substance that increases the H+ concentration when added to a water solution Acids turn blue litmus paper red, have a pH of less than 7, and their aqueous solutions react with bases and certain |

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| | metals to form salts. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Base:** | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| **Boil:** | To change from a liquid to a vapor by the application of heat. |
| **Chemical change:** | A reaction or a change in a substance produced by chemical means that results in producing a different chemical. |
| **Compound:** | A substance made up of at least two different elements held together by chemical bonds that can only be broken down into elements by chemical processes. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Conductivity:** | The ability or power to conduct or transmit heat, electricity, or sound. |
| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Electron:** | A stable elementary particle in the lepton family having a mass at rest of 9.107 × 10^-28 grams and an electric charge of approximately -1.602 × 10^-19 coulombs. Electrons orbit about the positively charged nuclei of atoms in distinct orbitals of different energy levels, called shells. |
| **Energy:** | The capacity to do work. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Gas:** | One of the fundamental states of matter in which the molecules do not have a fixed volume or shape. |
| **Gravity:** | The force of attraction between any two objects. |

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| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Infrared :** | Relating to the invisible part of the electromagnetic spectrum with wavelengths longer than those of visible red light but shorter than those of microwaves. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Melt:** | To be changed from a solid to a liquid state especially by the application of heat. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |

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| **Motion:** | The act or process of changing position and/or direction. |
| **Neutron:** | A subatomic particle having zero charge, found in the nucleus of an atom. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Periodic table:** | A tabular arrangement of the elements according to their atomic numbers so that elements with similar properties are in the same column. |
| **Physical change :** | A change of a substance from one form to another without a change in its chemical properties. |
| **Potential energy:** | Energy stored in a physical system due to the object's configuration and position. |
| **Proton:** | A subatomic particle having a positive charge and which is found in the nucleus of an atom. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Solubility:** | The ability or tendency of one substance to dissolve in another at a given temperature and pressure. |
| **Sound wave:** | Longitudinal pressure waves in any material medium regardless of whether they constitute audible sound; earthquake waves and ultrasonic waves are sometimes called sound waves. |

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| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Ultraviolet :** | Relating to electromagnetic radiation having frequencies higher than those of visible light but lower than those of x-rays, approximately 1015 -1016 hertz. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Volume:** | A measure of the amount of space an object takes up; also the loudness of a sound or signal. |
| **Wavelength:** | The distance between crests of a wave. |
| **Weight:** | The force with which a body is attracted to Earth or another celestial body, equal to the product of the object's mass and the acceleration of gravity. |

# Course: M/J Comprehensive Science 3, Advanced- 2002110

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4325.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 3, Advanced |
| **Course Number:** | 2002110 |
| **Course Abbreviated Title:** | M/J COMP SCI 3 ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).

**Special Notes:**

**Instructional Practices**
Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:

1. Ensuring wide reading from complex text that varies in length.
2. Making close reading and rereading of texts central to lessons.
3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.
4. Emphasizing students supporting answers based upon evidence from the text.
5. Providing extensive research and writing opportunities (claims and evidence).

Additional content that may be included in the Grade 8 NAEP Science assessment includes:

- Rocks and rock formations bear evidence of the minerals, materials, temperature/pressure conditions, and forces that created them. (SC.4.E.6.1 and SC.4.E.6.2)
- Earth as a whole has a magnetic field that is detectable at the surface with a compass, with north and south poles and lines of force. (SC.912.P.10.16)
- The Sun is the major source of energy for phenomena on Earth's surface. (SC.3.L.17.2; SC.3.E.5.2; SC.3.E.6.1; SC.4.P.10.4; SC.4.L.17.2)
- Water, which covers the majority of Earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle. (SC.5.E.7.1; SC.5.E.7.2; SC.5.E.7.6)
- A tiny fraction of the light energy from the Sun is Earth's primary source of energy, heating Earth surfaces and providing the energy that results in wind, ocean currents, and storms.(SC.2.E.7.2; SC.3.E.6.1)
- Following fertilization, cell division produces a small cluster of cells that then differentiate by appearance and function to

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| | form the basic tissues of an embryo. (SC.912.L.16.13)<br>• Characteristics of organisms are influenced by heredity and environment. (SC.4.L.16.2 and SC.4.L.16.3)<br>• Nuclear reactions take place in the Sun. (SC.912.P.10.10; SC.912.P.10.11)<br><br>The NAEP frameworks for Science may be accessed at http://www.nagb.org/publications/frameworks/science-09.pdf |

## STANDARDS (77)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |

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| LACC.68.RST.2.6: | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| LACC.68.RST.3.7: | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| LACC.68.RST.3.8: | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| LACC.68.RST.3.9: | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| LACC.68.RST.4.10: | By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. |
| LACC.68.WHST.1.1: | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| SC.8.E.5.11: | Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs. |
| SC.8.E.5.12: | Summarize the effects of space exploration on the economy and culture of Florida. |
| SC.8.E.5.2: | Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars. |
| LACC.68.WHST.1.2: | Write informative/explanatory texts, including the narration of |

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| | historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.68.WHST.3.7:** | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis |

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| | reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| SC.8.E.5.1: | Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance. |
| SC.8.E.5.10: | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| SC.912.L.18.7: | Identify the reactants, products, and basic functions of photosynthesis. |
| LACC.8.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.<br>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| LACC.8.SL.1.2: | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the |

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| | motives (e.g., social, commercial, political) behind its presentation. |
| **LACC.8.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| **LACC.8.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.8.SL.2.5:** | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |
| **MACC.8.F.2.5:** | Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. |
| **MACC.8.G.3.9:** | Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.<br><br>Remarks/Examples<br>**Fluency Expectations or Examples of Culminating Standards**<br><br>When students learn to solve problems involving volumes of cones, cylinders, and spheres — together with their previous grade 7 work in angle measure, area, surface area and volume (7.G.2.4–2.6) — they will have acquired a well-developed set of geometric measurement skills. These skills, along with proportional reasoning (7.RP) and multistep numerical problem solving (7.EE.2.3), can be combined and used in flexible ways as part of modeling during high school — not to mention after high school for college and careers. |
| **MACC.8.SP.1.4:** | Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?* |

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| **SC.8.E.5.3:** | Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition. |
| **SC.8.E.5.4:** | Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions. |
| **SC.8.E.5.5:** | Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). |
| **SC.8.E.5.6:** | Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics; and MACC.K12.MP.7: Look for and make use of structure. |
| **SC.8.E.5.7:** | Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions. |
| **SC.8.E.5.8:** | Compare various historical models of the Solar System, including geocentric and heliocentric.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.E.5.9:** | Explain the impact of objects in space on each other including:<br>1. the Sun on the Earth including seasons and gravitational attraction<br>2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body. |
| **SC.8.L.18.1:** | Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen. |
| **SC.8.L.18.2:** | Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide. |

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| SC.8.L.18.3: | Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.L.18.4: | Cite evidence that living systems follow the Laws of Conservation of Mass and Energy. |
| SC.8.N.1.1: | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| SC.8.N.1.2: | Design and conduct a study using repeated trials and replication. |
| SC.8.N.1.3: | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| SC.8.N.1.4: | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| SC.8.N.1.5: | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| SC.8.N.1.6: | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.N.2.1: | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| SC.8.N.2.2: | Discuss what characterizes science and its methods. |

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| | Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect science, and vice versa. |
| **SC.8.P.8.1:** | Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.<br>Remarks/Examples<br>Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.2:** | Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass. |
| **SC.8.P.8.3:** | Explore and describe the densities of various materials through measurement of their masses and volumes.<br>Remarks/Examples |

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| | CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.4:** | Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.5:** | Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.<br>Remarks/Examples<br>Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions. |
| **SC.8.P.8.6:** | Recognize that elements are grouped in the periodic table according to similarities of their properties. |
| **SC.8.P.8.7:** | Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.8:** | Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts. |
| **SC.8.P.8.9:** | Distinguish among mixtures (including solutions) and pure substances.<br>Remarks/Examples<br>Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions). |

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| | Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes. |
| **SC.8.P.9.1:** | Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes. |
| **SC.8.P.9.2:** | Differentiate between physical changes and chemical changes. |
| **SC.8.P.9.3:** | Investigate and describe how temperature influences chemical changes. |
| **SC.912.E.5.4:** | Explain the physical properties of the Sun and its dynamic nature and connect them to conditions and events on Earth.<br>Remarks/Examples<br>Describe the physical properties of the Sun (sunspot cycles, solar flares, prominences, layers of the Sun, coronal mass ejections, and nuclear reactions) and the impact of the Sun as the main source of external energy for the Earth. |
| **SC.912.L.18.8:** | Identify the reactants, products, and basic functions of aerobic and anaerobic cellular respiration. |
| **SC.912.L.18.9:** | Explain the interrelated nature of photosynthesis and cellular respiration.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.L.18.7; SC.912.L.18.8; SC.912.L.18.10. |
| **SC.912.P.8.1:** | Differentiate among the four states of matter.<br>Remarks/Examples<br>Differentiate among the four states of matter (solid, liquid, gas and plasma) in terms of energy, particle motion, and phase transitions. (Note: Currently five states of matter have been identified.) |
| **SC.912.P.8.11:** | Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH.<br>Remarks/Examples<br>Use experimental data to illustrate and explain the pH scale to characterize acid and base solutions. Compare and contrast the |

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| | strengths of various common acids and bases. |
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| **SC.912.P.8.2:** | Differentiate between physical and chemical properties and physical and chemical changes of matter.<br>Remarks/Examples |
| | Discuss volume, compressibility, density, conductivity, malleability, reactivity, molecular composition, freezing, melting and boiling points. Describe simple laboratory techniques that can be used to separate homogeneous and heterogeneous mixtures (e.g. filtration, distillation, chromatography, evaporation). |
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| **SC.912.P.8.4:** | Explore the scientific theory of atoms (also known as atomic theory) by describing the structure of atoms in terms of protons, neutrons and electrons, and differentiate among these particles in terms of their mass, electrical charges and locations within the atom.<br>Remarks/Examples |
| | Explain that electrons, protons and neutrons are parts of the atom and that the nuclei of atoms are composed of protons and neutrons, which experience forces of attraction and repulsion consistent with their charges and masses.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
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| **SC.912.P.8.5:** | Relate properties of atoms and their position in the periodic table to the arrangement of their electrons.<br>Remarks/Examples |
| | Use the periodic table and electron configuration to determine an element's number of valence electrons and its chemical and physical properties. Explain how chemical properties depend almost entirely on the configuration of the outer electron shell. |
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| **SC.912.P.8.7:** | Interpret formula representations of molecules and compounds in terms of composition and structure.<br>Remarks/Examples |
| | Write chemical formulas for simple covalent (HCl, SO2, CO2, and CH4), ionic (Na+ + Cl− → NaCl) and molecular (O2, H2O) compounds. Predict the formulas of ionic compounds based on the number of valence electrons and the charges on the ions. |
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## RELATED GLOSSARY TERM DEFINITIONS (70)

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| **Acid:** | A substance that increases the H+ concentration when added to a water solution Acids turn blue litmus paper red, have a pH of less than 7, and their aqueous solutions react with bases and certain metals to form salts. |
| **Aerobic:** | Occurring in the presence of oxygen or requiring oxygen to live. In aerobic respiration, which is the process used by the cells of most organisms, the production of energy from glucose metabolism requires the presence of oxygen. |
| **Anaerobic :** | Occurring in the absence of oxygen or not requiring oxygen to live. Anaerobic bacteria produce energy from food molecules without the presence of oxygen. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Attraction :** | A term used to describe the electric or magnetic force exerted by oppositely charged objects or to describe the gravitational force that pulls objects toward each other. |
| **Base:** | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| **Boil:** | To change from a liquid to a vapor by the application of heat. |
| **Chemical change:** | A reaction or a change in a substance produced by chemical means that results in producing a different chemical. |
| **Compound:** | A substance made up of at least two different elements held together by chemical bonds that can only be broken down into elements by chemical processes. |
| **Concentration:** | The relative amount of a particular substance, a solute, or mixture. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Conductivity:** | The ability or power to conduct or transmit heat, electricity, or sound. |

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| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Eclipse:** | The partial or total blocking of light of one celestial object by another. |
| **Electromagnetic spectrum:** | The entire range of electromagnetic radiation. At one end of the spectrum are gamma rays, which have the shortest wavelengths and high frequencies. At the other end are radio waves, which have the longest wavelengths and low frequencies. Visible light is near the center of the spectrum. |
| **Electron:** | A stable elementary particle in the lepton family having a mass at rest of 9.107 × 10^-28 grams and an electric charge of approximately -1.602 × 10^-19 coulombs. Electrons orbit about the positively charged nuclei of atoms in distinct orbitals of different energy levels, called shells. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| **Evaporation:** | The process by which a liquid is converted to its vapor phase by heating the liquid. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Freeze:** | To pass from the liquid to the solid state by loss of heat from the substance/system. |
| **Frequency:** | The number of cycles or waves per unit time. |
| **Galaxy:** | A large collection of stars, gases, and dust that are part of the universe (e.g., the Milky Way galaxy) bound together by gravitational forces. |

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| **Gas:** | One of the fundamental states of matter in which the molecules do not have a fixed volume or shape. |
| **Geocentric:** | Relating to a model of the solar system or universe having the Earth as the center. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heliocentric:** | Relating to a model of the solar system or universe having the Sun as the center. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Melt:** | To be changed from a solid to a liquid state especially by the application of heat. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Moon:** | A natural satellite that revolves around a planet. |

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| **Motion:** | The act or process of changing position and/or direction. |
| **Neutron:** | A subatomic particle having zero charge, found in the nucleus of an atom. |
| **Nuclear reaction:** | A process, such as fission, fusion, or radioactive decay, in which the structure of an atomic nucleus is altered through release of energy or mass or by being broken apart. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Periodic table:** | A tabular arrangement of the elements according to their atomic numbers so that elements with similar properties are in the same column. |
| **Photosynthesis:** | A chemical process by which plants use light energy to convert carbon dioxide and water into carbohydrates (sugars). |
| **Physical change :** | A change of a substance from one form to another without a change in its chemical properties. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Proton:** | A subatomic particle having a positive charge and which is found in the nucleus of an atom. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Season:** | One of four natural divisions of the year—spring, summer, autumn, and winter—in temperate zones. Each season has its own characteristic weather and lasts approximately three months. The change in the seasons is brought about by the shift in the angle at which the Sun's rays strike the Earth. This angle changes as the Earth orbits in its yearly cycle around the Sun due to the tilt of the Earth's axis. |

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| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solar system:** | A star and all the planets and other bodies that orbit it; the region in space where these bodies move. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Solubility:** | The ability or tendency of one substance to dissolve in another at a given temperature and pressure. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tide:** | The regular rise and fall in the surface level of the Earth's oceans, seas, and bays caused by the gravitational attraction of the Moon and to a lesser extent of the Sun. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Volume:** | A measure of the amount of space an object takes up; also the loudness of a sound or signal. |
| **Wavelength:** | The distance between crests of a wave. |
| **Weight:** | The force with which a body is attracted to Earth or another celestial body, equal to the product of the object's mass and the acceleration of gravity. |

# Course: M/J Comprehensive Science 3-2002100

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4322.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 3 |
| **Course Number:** | 2002100 |
| **Course Abbreviated Title:** | M/J COMP SCI 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).

**Special Notes:**

**Instructional Practices**
Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:

1. Ensuring wide reading from complex text that varies in length.
2. Making close reading and rereading of texts central to lessons.
3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.
4. Emphasizing students supporting answers based upon evidence from the text.
5. Providing extensive research and writing opportunities (claims and evidence).

Additional content that may be included in the Grade 8 NAEP Science assessment includes:

- Rocks and rock formations bear evidence of the minerals, materials, temperature/pressure conditions, and forces that created them. (SC.4.E.6.1 and SC.4.E.6.2)
- Earth as a whole has a magnetic field that is detectable at the surface with a compass, with north and south poles and lines of force. (SC.912.P.10.16)
- The Sun is the major source of energy for phenomena on Earth's surface. (SC.3.L.17.2; SC.3.E.5.2; SC.3.E.6.1; SC.4.P.10.4; SC.4.L.17.2)
- Water, which covers the majority of Earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle. (SC.5.E.7.1; SC.5.E.7.2; SC.5.E.7.6)
- A tiny fraction of the light energy from the Sun is Earth's primary source of energy, heating Earth surfaces and providing the energy that results in wind, ocean currents, and storms. (SC.2.E.7.2; SC.3.E.6.1)
- Following fertilization, cell division produces a small cluster of cells that then differentiate by appearance and function to

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| | form the basic tissues of an embryo. (SC.912.L.16.13)<br>• Characteristics of organisms are influenced by heredity and environment. (SC.4.L.16.2 and SC.4.L.16.3)<br>• Nuclear reactions take place in the Sun. (SC.912.P.10.10; SC.912.P.10.11)<br><br>The NAEP frameworks for Science may be accessed at http://www.nagb.org/publications/frameworks/science-09.pdf |

## STANDARDS (66)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |

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| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.RST.4.10:** | By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **SC.8.E.5.3:** | Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition. |
| **SC.8.E.5.4:** | Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. |

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| | a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.68.WHST.3.7:** | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |

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| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| SC.8.E.5.11: | Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs. |
| SC.8.E.5.12: | Summarize the effects of space exploration on the economy and culture of Florida. |
| SC.8.E.5.2: | Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars. |
| LACC.8.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.<br>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| LACC.8.SL.1.2: | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. |
| LACC.8.SL.1.3: | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| LACC.8.SL.2.4: | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and |

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| | well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.8.SL.2.5: | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |
| MACC.8.F.2.5: | Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. |
| MACC.8.G.3.9: | Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.<br><br>Remarks/Examples<br>**Fluency Expectations or Examples of Culminating Standards**<br><br>When students learn to solve problems involving volumes of cones, cylinders, and spheres — together with their previous grade 7 work in angle measure, area, surface area and volume (7.G.2.4–2.6) — they will have acquired a well-developed set of geometric measurement skills. These skills, along with proportional reasoning (7.RP) and multistep numerical problem solving (7.EE.2.3), can be combined and used in flexible ways as part of modeling during high school — not to mention after high school for college and careers. |
| SC.8.E.5.1: | Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance. |
| SC.8.E.5.10: | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| SC.8.E.5.5: | Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). |
| SC.8.E.5.6: | Create models of solar properties including: rotation, structure of the |

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| | Sun, convection, sunspots, solar flares, and prominences.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics; and MACC.K12.MP.7: Look for and make use of structure. |
| SC.8.E.5.7: | Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions. |
| SC.8.E.5.8: | Compare various historical models of the Solar System, including geocentric and heliocentric.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.E.5.9: | Explain the impact of objects in space on each other including:<br>1. the Sun on the Earth including seasons and gravitational attraction<br>2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body. |
| SC.8.L.18.1: | Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen. |
| SC.8.L.18.2: | Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide. |
| SC.8.L.18.3: | Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.L.18.4: | Cite evidence that living systems follow the Laws of Conservation of Mass and Energy. |
| SC.8.N.1.1: | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and |

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| | carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| **SC.8.N.1.2:** | Design and conduct a study using repeated trials and replication. |
| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |

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| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect science, and vice versa. |
| **SC.8.P.8.1:** | Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.<br>Remarks/Examples<br>Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.2:** | Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass. |
| **SC.8.P.8.3:** | Explore and describe the densities of various materials through measurement of their masses and volumes.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.4:** | Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |

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| SC.8.P.8.5: | Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.<br>Remarks/Examples<br>Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions. |
| SC.8.P.8.6: | Recognize that elements are grouped in the periodic table according to similarities of their properties. |
| SC.8.P.8.7: | Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.P.8.8: | Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts. |
| SC.8.P.8.9: | Distinguish among mixtures (including solutions) and pure substances.<br>Remarks/Examples<br>Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions). Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes. |
| SC.8.P.9.1: | Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes. |
| SC.8.P.9.2: | Differentiate between physical changes and chemical changes. |
| SC.8.P.9.3: | Investigate and describe how temperature influences chemical changes. |

## RELATED GLOSSARY TERM DEFINITIONS (64)

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| **Acid:** | A substance that increases the H+ concentration when added to a water solution Acids turn blue litmus paper red, have a pH of less than 7, and their aqueous solutions react with bases and certain metals to form salts. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Attraction :** | A term used to describe the electric or magnetic force exerted by oppositely charged objects or to describe the gravitational force that pulls objects toward each other. |
| **Base:** | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| **Boil:** | To change from a liquid to a vapor by the application of heat. |
| **Chemical change:** | A reaction or a change in a substance produced by chemical means that results in producing a different chemical. |
| **Compound:** | A substance made up of at least two different elements held together by chemical bonds that can only be broken down into elements by chemical processes. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Conductivity:** | The ability or power to conduct or transmit heat, electricity, or sound. |
| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Eclipse:** | The partial or total blocking of light of one celestial object by another. |

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| **Electromagnetic spectrum:** | The entire range of electromagnetic radiation. At one end of the spectrum are gamma rays, which have the shortest wavelengths and high frequencies. At the other end are radio waves, which have the longest wavelengths and low frequencies. Visible light is near the center of the spectrum. |
| **Electron:** | A stable elementary particle in the lepton family having a mass at rest of 9.107 × 10^-28 grams and an electric charge of approximately -1.602 × 10^-19 coulombs. Electrons orbit about the positively charged nuclei of atoms in distinct orbitals of different energy levels, called shells. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Frequency:** | The number of cycles or waves per unit time. |
| **Galaxy:** | A large collection of stars, gases, and dust that are part of the universe (e.g., the Milky Way galaxy) bound together by gravitational forces. |
| **Gas:** | One of the fundamental states of matter in which the molecules do not have a fixed volume or shape. |
| **Geocentric:** | Relating to a model of the solar system or universe having the Earth as the center. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heliocentric:** | Relating to a model of the solar system or universe having the Sun as the center. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among |

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| | phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Melt:** | To be changed from a solid to a liquid state especially by the application of heat. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Moon:** | A natural satellite that revolves around a planet. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Neutron:** | A subatomic particle having zero charge, found in the nucleus of an atom. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Periodic table:** | A tabular arrangement of the elements according to their atomic numbers so that elements with similar properties are in the same column. |

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| **Photosynthesis:** | A chemical process by which plants use light energy to convert carbon dioxide and water into carbohydrates (sugars). |
| **Physical change :** | A change of a substance from one form to another without a change in its chemical properties. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Proton:** | A subatomic particle having a positive charge and which is found in the nucleus of an atom. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Season:** | One of four natural divisions of the year—spring, summer, autumn, and winter—in temperate zones. Each season has its own characteristic weather and lasts approximately three months. The change in the seasons is brought about by the shift in the angle at which the Sun's rays strike the Earth. This angle changes as the Earth orbits in its yearly cycle around the Sun due to the tilt of the Earth's axis. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solar system:** | A star and all the planets and other bodies that orbit it; the region in space where these bodies move. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Solubility:** | The ability or tendency of one substance to dissolve in another at a given temperature and pressure. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts |

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| | or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tide:** | The regular rise and fall in the surface level of the Earth's oceans, seas, and bays caused by the gravitational attraction of the Moon and to a lesser extent of the Sun. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Volume:** | A measure of the amount of space an object takes up; also the loudness of a sound or signal. |
| **Wavelength:** | The distance between crests of a wave. |
| **Weight:** | The force with which a body is attracted to Earth or another celestial body, equal to the product of the object's mass and the acceleration of gravity. |

# Course: M/J Vocal Techniques 1- 1303070

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4180.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Vocal Techniques 1 |
| **Course Number:** | 1303070 |
| **Course Abbreviated Title:** | M/J VOCAL TECNQS 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with little or no vocal experience develop musicianship, technical proficiency, and performance skills. Beginning musicians focus on development of skills and techniques through scales, etudes, and solo literature. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (22)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.

MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.6.SL.1 Comprehension and Collaboration**

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| **LACC.6.SL.1.2 :** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.6.SL.1.3 :** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.6.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

## LACC.68.WHST.2 Production and Distribution of Writing

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

## MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or |

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| | others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, |

# Course: M/J Earth/Space Science- 2001010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4316.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Earth/Space Science |
| **Course Number:** | 2001010 |
| **Course Abbreviated Title:** | M/J EARTH/SPA SCI |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007). |

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| | **Special Notes:**<br><br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (91)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

**Use grade appropriate Nature of Science benchmarks** (i.e. if this course is offered to seventh grade students, then the SC.7.N benchmarks should be integrated into the course content, and SC.6.N and SC.8.N benchmarks should be omitted from the seventh grade course).

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| **HE.6.C.1.3:** | Identify environmental factors that affect personal health. |

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| | Remarks/Examples<br>Some examples may include air quality, availability of sidewalks, contaminated food, and road hazards. |
| LACC.6.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.<br>c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.<br>d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. |
| LACC.6.SL.1.2: | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| LACC.6.SL.1.3: | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |
| LACC.6.SL.2.4: | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.6.SL.2.5: | Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information. |
| LACC.68.RST.1.1: | Cite specific textual evidence to support analysis of science and technical texts. |
| LACC.68.RST.1.2: | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or |

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| | opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. |

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| | a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.68.WHST.3.7:** | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |

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| **LACC.68.WHST.4.10:** | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| **MACC.6.EE.3.9:** | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.* |
| **MACC.6.SP.2.4:** | Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br><br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. |
| **SC.6.E.6.1:** | Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition. |
| **SC.6.E.6.2:** | Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.<br>Remarks/Examples<br>Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1. |

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| SC.6.E.7.1: | Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system. |
| SC.6.E.7.2: | Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.E.7.3: | Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; MACC.K12.MP.6: Attend to precision; and, MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.E.7.4: | Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere. |
| SC.6.E.7.5: | Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.E.7.6: | Differentiate between weather and climate. |
| SC.6.E.7.7: | Investigate how natural disasters have affected human life in Florida. |
| SC.6.E.7.8: | Describe ways human beings protect themselves from hazardous weather and sun exposure. |
| SC.6.E.7.9: | Describe how the composition and structure of the atmosphere protects life and insulates the planet.<br>Remarks/Examples |

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| | CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.N.1.1:** | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.6.N.1.2:** | Explain why scientific investigations should be replicable. |
| **SC.6.N.1.3:** | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007). |
| **SC.6.N.1.4:** | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| **SC.6.N.1.5:** | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, LACC.68.WHST.3.9. |
| **SC.6.N.2.1:** | Distinguish science from other activities involving thought.<br>Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an |

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| | individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |
| **SC.6.N.2.2:** | Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered. |
| **SC.6.N.2.3:** | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| **SC.6.N.3.1:** | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| **SC.6.N.3.2:** | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| **SC.6.N.3.3:** | Give several examples of scientific laws. |
| **SC.6.N.3.4:** | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.7.E.6.1:** | Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores. |
| **SC.7.E.6.2:** | Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.7.E.6.3:** | Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating. |
| **SC.7.E.6.4:** | Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes. |

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| **SC.7.E.6.5:** | Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building. |
| **SC.7.E.6.6:** | Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. |
| **SC.7.E.6.7:** | Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. |
| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.2:** | Differentiate replication (by others) from repetition (multiple trials). |
| **SC.7.N.1.3:** | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |
| **SC.7.N.1.7:** | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |

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| SC.7.N.2.1: | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| SC.7.N.3.1: | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| SC.7.N.3.2: | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.E.5.1: | Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance. |
| SC.8.E.5.10: | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| SC.8.E.5.11: | Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs. |
| SC.8.E.5.12: | Summarize the effects of space exploration on the economy and culture of Florida. |
| SC.8.E.5.2: | Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars. |
| SC.8.E.5.3: | Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition. |
| SC.8.E.5.4: | Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions. |
| SC.8.E.5.5: | Describe and classify specific physical properties of stars: apparent |

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| | magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). |
| **SC.8.E.5.6:** | Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics; and MACC.K12.MP.7: Look for and make use of structure. |
| **SC.8.E.5.7:** | Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions. |
| **SC.8.E.5.8:** | Compare various historical models of the Solar System, including geocentric and heliocentric.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.E.5.9:** | Explain the impact of objects in space on each other including:<br>1. the Sun on the Earth including seasons and gravitational attraction<br>2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body. |
| **SC.8.N.1.1:** | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| **SC.8.N.1.2:** | Design and conduct a study using repeated trials and replication. |
| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |

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| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect science, and vice versa. |

## RELATED GLOSSARY TERM DEFINITIONS (59)

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| **Atmosphere:** | The layers of gas that surround Earth, other planets, or stars. |
| **Attraction :** | A term used to describe the electric or magnetic force exerted by oppositely charged objects or to describe the gravitational force that pulls objects toward each other. |
| **Biosphere:** | The part of the earth and its atmosphere in which living organisms exist or that is capable of supporting life. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Current :** | The amount of electric charge flowing past a specified circuit point per unit time. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Delta:** | A usually triangular mass of sediment, especially silt and sand, deposited at the mouth of a river. Deltas form when a river flows into a body of standing water, such as a sea or lake, and deposits large quantities of sediment. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Desertification:** | The transformation of arable or habitable land to desert, as by a change in climate or destructive land use. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Earthquake:** | The shaking of the ground caused by a sudden release of energy in Earth's crust. |
| **Eclipse:** | The partial or total blocking of light of one celestial object by another. |
| **Electromagnetic spectrum:** | The entire range of electromagnetic radiation. At one end of the spectrum are gamma rays, which have the shortest wavelengths and high frequencies. At the other end are radio waves, which have the longest wavelengths and low frequencies. Visible light is near the center of the spectrum. |

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| **Energy:** | The capacity to do work. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Frequency:** | The number of cycles or waves per unit time. |
| **Galaxy:** | A large collection of stars, gases, and dust that are part of the universe (e.g., the Milky Way galaxy) bound together by gravitational forces. |
| **Geocentric:** | Relating to a model of the solar system or universe having the Earth as the center. |
| **Geosphere:** | The solid part of the earth consisting of the crust and outer mantle. |
| **Glacier:** | A huge mass of ice slowly flowing over a land mass, formed from compacted snow in an area where snow accumulation exceeds melting and sublimation. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Heliocentric:** | Relating to a model of the solar system or universe having the Sun as the center. |
| **Humidity:** | The amount of water vapor in the atmosphere, usually expressed as either absolute humidity or relative humidity. |
| **Hydrosphere:** | All of the Earth's water, including surface water (water in oceans, lakes, and rivers), groundwater (water in soil and beneath the Earth's surface), snowcover, ice, and water in the atmosphere, including water vapor. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |

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| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Lithosphere:** | The outer part of the solid earth composed of rock essentially like that exposed at the surface, consisting of the crust and outermost layer of the mantle, and usually considered to be about 60 miles (100 kilometers) in thickness. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Moon:** | A natural satellite that revolves around a planet. |
| **Observation :** | What one has observed using senses or instruments. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Plate tectonics:** | Theory of global dynamics in which Earth's crust is divided into a smaller number of large, rigid plates whose movements cause seismic activity along their borders. |
| **Precipitation:** | In meteorology, a form of water, such as rain, snow, or sleet that condenses from the atmosphere, becomes too heavy to remain suspended, and falls to the Earth's surface. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Radioactive dating:** | Measurement of the amount of radioactive material (usually carbon 14) that an object contains; can be used to estimate the age of the object. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |

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| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Season:** | One of four natural divisions of the year—spring, summer, autumn, and winter—in temperate zones. Each season has its own characteristic weather and lasts approximately three months. The change in the seasons is brought about by the shift in the angle at which the Sun's rays strike the Earth. This angle changes as the Earth orbits in its yearly cycle around the Sun due to the tilt of the Earth's axis. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solar system:** | A star and all the planets and other bodies that orbit it; the region in space where these bodies move. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Superposition:** | The principle that in a group of stratified sedimentary rocks the lowest were the earliest to be deposited. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tide:** | The regular rise and fall in the surface level of the Earth's oceans, seas, and bays caused by the gravitational attraction of the Moon and to a lesser extent of the Sun. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Wavelength:** | The distance between crests of a wave. |

# Course: M/J Life Science, Advanced- 2000020

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4241.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Life Science, Advanced |
| **Course Number:** | 2000020 |
| **Course Abbreviated Title:** | M/J LIF SCI ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Biological Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007). |

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| | **Special Notes:**<br><br>**Instructional Practices**<br><br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (104)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

**Use grade appropriate Nature of Science benchmarks** (i.e. if this course is offered to seventh grade students, then the SC.7.N benchmarks should be integrated into the seventh grade course, and SC.6.N and SC.8.N benchmarks should be omitted from the seventh grade course).

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| HE.6.C.1.8: | Examine the likelihood of injury or illness if engaging in unhealthy/risky behaviors.<br>Remarks/Examples<br>Obesity related to poor nutrition and inactivity, cancer and chronic lung disease related to tobacco use, injuries caused from failure to use seat restraint, and sexually transmitted diseases caused by sexual activity. |
| HE.7.C.1.3: | Analyze how environmental factors affect personal health.<br>Remarks/Examples<br>Food refrigeration, appropriate home heating and cooling, air/water quality, and garbage/trash collection. |
| HE.7.C.1.7: | Describe how heredity can affect personal health.<br>Remarks/Examples<br>Sickle-cell anemia, diabetes, and acne. |
| LACC.68.RST.1.1: | Cite specific textual evidence to support analysis of science and technical texts. |
| LACC.68.RST.1.2: | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| LACC.68.RST.1.3: | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| LACC.68.RST.2.4: | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| LACC.68.RST.2.5: | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| LACC.68.RST.2.6: | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| LACC.68.RST.3.7: | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| LACC.68.RST.3.8: | Distinguish among facts, reasoned judgment based on research |

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| | findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **SC.6.N.1.2:** | Explain why scientific investigations should be replicable. |
| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone. |

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| | f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| LACC.68.WHST.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| LACC.68.WHST.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| LACC.7.SL.1.1a: | Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. |
| LACC.7.SL.1.1b: | Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. |
| LACC.7.SL.1.1c: | Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. |

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| **LACC.7.SL.1.1d:** | Acknowledge new information expressed by others and, when warranted, modify their own views. |
| **LACC.7.SL.1.2:** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. |
| **LACC.7.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |
| **LACC.7.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.7.SL.2.5:** | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| **MACC.6.EE.3.9:** | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.* |
| **MACC.6.SP.2.4:** | Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br><br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which |

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| | the data were gathered. |
| MACC.6.SP.2.5a: | a. Reporting the number of observations. |
| MACC.6.SP.2.5b: | b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. |
| MACC.6.SP.2.5c: | c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. |
| MACC.7.SP.2.4: | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| MACC.7.SP.3.5: | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| SC.6.L.14.1: | Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.L.14.2: | Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life. |
| SC.6.L.14.3: | Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing. |
| SC.6.L.14.4: | Compare and contrast the structure and function of major organelles |

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| | of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.L.14.5: | Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis. |
| SC.6.L.14.6: | Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.<br>Remarks/Examples<br>Integrate HE.6.C.1.8. Explain how body systems are impacted by hereditary factors and infectious agents. |
| SC.6.L.15.1: | Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains. |
| SC.6.N.1.1: | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| SC.6.N.1.3: | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect |

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| | relationships (Schwartz, 2007). |
| **SC.6.N.1.4:** | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| **SC.6.N.1.5:** | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, LACC.68.WHST.3.9. |
| **SC.6.N.2.1:** | Distinguish science from other activities involving thought.<br>Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |
| **SC.6.N.2.2:** | Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered. |
| **SC.6.N.2.3:** | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| **SC.6.N.3.1:** | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| **SC.6.N.3.2:** | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| **SC.6.N.3.3:** | Give several examples of scientific laws. |
| **SC.6.N.3.4:** | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |

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| SC.7.L.15.1: | Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species. |
| SC.7.L.15.2: | Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. |
| SC.7.L.15.3: | Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species. |
| SC.7.L.16.1: | Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| SC.7.L.16.2: | Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees. |
| SC.7.L.16.3: | Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis. |
| SC.7.L.16.4: | Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the environment.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| SC.7.L.17.1: | Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web. |
| SC.7.L.17.2: | Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism. |
| SC.7.L.17.3: | Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting |

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| | sites. |
| SC.7.N.1.1: | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| SC.7.N.1.2: | Differentiate replication (by others) from repetition (multiple trials). |
| SC.7.N.1.3: | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| SC.7.N.1.4: | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| SC.7.N.1.5: | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| SC.7.N.1.6: | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |
| SC.7.N.1.7: | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| SC.7.N.2.1: | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| SC.7.N.3.1: | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| SC.7.N.3.2: | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples |

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| | CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.L.18.1:** | Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen. |
| **SC.8.L.18.2:** | Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide. |
| **SC.8.L.18.3:** | Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.L.18.4:** | Cite evidence that living systems follow the Laws of Conservation of Mass and Energy. |
| **SC.8.N.1.1:** | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| **SC.8.N.1.2:** | Design and conduct a study using repeated trials and replication. |
| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples |

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| | Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect science, and vice versa. |
| **SC.912.L.14.2:** | Relate structure to function for the components of plant and animal cells. Explain the role of cell membranes as a highly selective barrier (passive and active transport). |
| **SC.912.L.14.3:** | Compare and contrast the general structures of plant and animal cells. Compare and contrast the general structures of prokaryotic and eukaryotic cells.<br>Remarks/Examples<br>Annually Assessed on Biology EOC. Also assesses SC.912.L.14.2. |
| **SC.912.L.15.13:** | Describe the conditions required for natural selection, including: overproduction of offspring, inherited variation, and the struggle to survive, which result in differential reproductive success.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.L.15.14, SC.912.L.15.15, and SC.912.N.1.3. |

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| SC.912.L.15.6: | Discuss distinguishing characteristics of the domains and kingdoms of living organisms.<br>Remarks/Examples<br>Annually Assessed on Biology EOC. Also assesses SC.912.L.15.4; SC.912.L.15.5; SC.912.N.1.3; and SC.912.N.1.6. |
| SC.912.L.16.14: | Describe the cell cycle, including the process of mitosis. Explain the role of mitosis in the formation of new cells and its importance in maintaining chromosome number during asexual reproduction. |
| SC.912.L.16.16: | Describe the process of meiosis, including independent assortment and crossing over. Explain how reduction division results in the formation of haploid gametes or spores. |
| SC.912.L.16.2: | Discuss observed inheritance patterns caused by various modes of inheritance, including dominant, recessive, codominant, sex-linked, polygenic, and multiple alleles. |
| SC.912.L.17.6: | Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism. |
| SC.912.L.17.9: | Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.E.7.1. |
| SC.912.L.18.7: | Identify the reactants, products, and basic functions of photosynthesis. |
| SC.912.L.18.8: | Identify the reactants, products, and basic functions of aerobic and anaerobic cellular respiration. |
| SC.912.L.18.9: | Explain the interrelated nature of photosynthesis and cellular respiration.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.L.18.7; SC.912.L.18.8; SC.912.L.18.10. |

## RELATED GLOSSARY TERM DEFINITIONS (68)

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| **Aerobic:** | Occurring in the presence of oxygen or requiring oxygen to live. In aerobic respiration, which is the process used by the cells of most organisms, the production of energy from glucose metabolism requires the presence of oxygen. |
| **Anaerobic :** | Occurring in the absence of oxygen or not requiring oxygen to live. Anaerobic bacteria produce energy from food molecules without the presence of oxygen. |
| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Bacteria:** | Any of a large group of one-celled organisms that lack a cell nucleus, reproduce by fission or by forming spores, and in some cases cause disease. |
| **Biotechnology:** | The manipulation (as through genetic engineering) of living organisms or their components to produce useful usually commercial products (as pest resistant crops, new bacterial strains, or novel pharmaceuticals). |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chloroplast:** | A plastid in most cells of most plants that contains chlorophylls and carotenoid pigments and produces glucose through photosynthesis. |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Clone:** | To produce genetic material or produce or grow a cell, group of cells, or organism from a single original cell. |

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| **Codominant:** | Relating to two alleles of a gene pair in a heterozygote that are both fully expressed. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Consumer:** | An organism that feeds on other organisms for food. |
| **Cytoplasm:** | The material that surrounds organelles and inside the cell membrane. |
| **Decomposer :** | Any organism that feeds or obtains nutrients by breaking down organic matter from dead organisms. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Diversity:** | The different species in a given area or specific period of time. |
| **DNA:** | Deoxyribonucleic acid; a nucleic acid that is genetic material; present in all organisms. |
| **Dominance:** | Tendency of certain (dominant) alleles to mask the expression of their corresponding (recessive) alleles. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| **Evolution :** | A theory that the various types of species arise from pre-existing species and that distinguishable characteristics are due to modifications through successive generations. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Fossil:** | A whole or part of an organism that has been preserved in sedimentary rock. |
| **Fungus:** | A kingdom of eukaryotic organisms that reproduce by spores and have cell walls that contain chitin, examples include the mushrooms, molds, yeasts, and mildews. |
| **Gamete:** | A reproductive cell having the haploid number of chromosomes, especially a mature sperm or egg capable of fusing with a gamete of the opposite sex to produce the fertilized egg. |

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| **Genetic:** | Affecting or determined by genes. |
| **Genotype:** | The genetic information contained in a cell, an organism, or an individual. |
| **Haploid:** | Having a single set of each chromosome in a cell or cell nucleus. In most animals, only the gametes (reproductive cells) are haploid. |
| **Heredity:** | The passage of biological traits or characteristics from parents to offspring through the inheritance of genes. |
| **Homeostasis:** | The tendency of an organism or cell to regulate its internal conditions, such as the chemical composition of its body fluids, so as to maintain health and functioning, regardless of outside conditions. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Meiosis:** | The process of nuclear division in cells during which the number of chromosomes is reduced by half. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Mitochondrion:** | A spherical or elongated organelle in the cytoplasm of nearly all eukaryotic cells that uses enzymes and membranes to make chemical energy available to the cell to make food to usable energy. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and |

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| | are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Natural selection:** | The theory stating every organism displays slight variations from related organisms, and these variations make an organism more or less suited for survival and reproduction in specific habitats. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Offspring:** | The progeny or descendants of an animal or plant considered as a group. |
| **Organ:** | A structure containing different tissues that are organized to carry out a specific function of the body (e.g., heart, lungs, brain, etc.) |
| **Organelle:** | A differentiated structure within a cell, such as a mitochondrion, vacuole, or chloroplast, that performs a specific function. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Parasite:** | An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host. |
| **Phenotype:** | The observable characteristics of an organism resulting from the interaction of its genetic makeup and its environment. |
| **Photosynthesis:** | A chemical process by which plants use light energy to convert carbon dioxide and water into carbohydrates (sugars). |
| **Polygenic:** | Any of a group of nonallelic genes that collectively control the inheritance of a quantitative character or modify the expression of a qualitative character. |
| **Producer :** | An organism, usually a plant or bacterium, that produces organic compounds from simple inorganic molecules and energy (typically light energy) from the environment. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Recessive:** | An allele for a trait that will be masked unless the organism is |

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| | homozygous for this trait. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Sexual reproduction:** | Reproduction involving the union of male and female gametes producing an offspring with traits from both parents. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tissue:** | Similar cells acting to perform a specific function. |
| **Vacuole:** | A cavity in the cytoplasm of a cell, bound by a single membrane and containing water, food, or metabolic waste. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Virus:** | A noncellular, usually disease-causing, particle with an outer protein code and a core of genetic material that is capable of growth and replication in living host cells. |

# Course: M/J Life Science- 2000010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4238.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Life Science |
| **Course Number:** | 2000010 |
| **Course Abbreviated Title:** | M/J LIF SCI |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Biological Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007). |

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| | **Special Notes:**<br><br>**Instructional Practices**<br><br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (87)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

**Use grade appropriate Nature of Science benchmarks** (i.e. if this course is offered to sixth

grade students, then the SC.6.N benchmarks should be integrated into the sixth grade course, and SC.7.N and SC.8.N benchmarks should be omitted from the sixth grade course).

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| **HE.6.C.1.8:** | Examine the likelihood of injury or illness if engaging in unhealthy/risky behaviors.<br>Remarks/Examples<br>Obesity related to poor nutrition and inactivity, cancer and chronic lung disease related to tobacco use, injuries caused from failure to use seat restraint, and sexually transmitted diseases caused by sexual activity. |
| **HE.7.C.1.3:** | Analyze how environmental factors affect personal health.<br>Remarks/Examples<br>Food refrigeration, appropriate home heating and cooling, air/water quality, and garbage/trash collection. |
| **HE.7.C.1.4:** | Describe how heredity can affect personal health.<br>Remarks/Examples<br>Some examples may include sickle cell anemia, diabetes, acne. |
| **LACC.6.SL.1.1a:** | Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. |
| **LACC.6.SL.1.1b:** | Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed. |
| **LACC.6.SL.1.1c:** | Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion. |
| **LACC.6.SL.1.1d:** | Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. |
| **LACC.6.SL.1.2:** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| **LACC.6.SL.1.3:** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |

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| **LACC.6.SL.2.4:** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.6.SL.2.5:** | Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources. |

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| | c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| LACC.68.WHST.1.2: | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| LACC.68.WHST.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| LACC.68.WHST.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a |

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| | self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |
| **LACC.68.WHST.4.10:** | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| **MACC.6.EE.3.9:** | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.* |
| **MACC.6.SP.2.4:** | Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br><br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which |

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| | the data were gathered. |
| SC.6.L.14.1: | Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.L.14.2: | Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life. |
| SC.6.L.14.3: | Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing. |
| SC.6.L.14.4: | Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.L.14.5: | Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis. |
| SC.6.L.14.6: | Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.<br>Remarks/Examples<br>Integrate HE.6.C.1.8. Explain how body systems are impacted by hereditary factors and infectious agents. |
| SC.6.L.15.1: | Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains. |

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| **SC.6.N.1.1:** | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.6.N.1.2:** | Explain why scientific investigations should be replicable. |
| **SC.6.N.1.3:** | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007). |
| **SC.6.N.1.4:** | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| **SC.6.N.1.5:** | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, LACC.68.WHST.3.9. |
| **SC.6.N.2.1:** | Distinguish science from other activities involving thought.<br>Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |

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| SC.6.N.2.2: | Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered. |
| SC.6.N.2.3: | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| SC.6.N.3.1: | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| SC.6.N.3.2: | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| SC.6.N.3.3: | Give several examples of scientific laws. |
| SC.6.N.3.4: | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.7.L.15.1: | Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species. |
| SC.7.L.15.2: | Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. |
| SC.7.L.15.3: | Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species. |
| SC.7.L.16.1: | Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |

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| SC.7.L.16.2: | Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees. |
| SC.7.L.16.3: | Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis. |
| SC.7.L.16.4: | Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the environment.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| SC.7.L.17.1: | Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web. |
| SC.7.L.17.2: | Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism. |
| SC.7.L.17.3: | Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites. |
| SC.7.N.1.1: | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| SC.7.N.1.2: | Differentiate replication (by others) from repetition (multiple trials). |
| SC.7.N.1.3: | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |

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| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |
| **SC.7.N.1.7:** | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| **SC.7.N.2.1:** | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| **SC.7.N.3.1:** | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| **SC.7.N.3.2:** | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.L.18.1:** | Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen. |
| **SC.8.L.18.2:** | Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide. |
| **SC.8.L.18.3:** | Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.L.18.4:** | Cite evidence that living systems follow the Laws of Conservation of Mass and Energy. |
| **SC.8.N.1.1:** | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic |

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| | observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| **SC.8.N.1.2:** | Design and conduct a study using repeated trials and replication. |
| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |

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| SC.8.N.4.1: | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| SC.8.N.4.2: | Explain how political, social, and economic concerns can affect science, and vice versa. |

## RELATED GLOSSARY TERM DEFINITIONS (59)

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| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Bacteria:** | Any of a large group of one-celled organisms that lack a cell nucleus, reproduce by fission or by forming spores, and in some cases cause disease. |
| **Biotechnology:** | The manipulation (as through genetic engineering) of living organisms or their components to produce useful usually commercial products (as pest resistant crops, new bacterial strains, or novel pharmaceuticals). |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chloroplast:** | A plastid in most cells of most plants that contains chlorophylls and carotenoid pigments and produces glucose through photosynthesis. |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Clone:** | To produce genetic material or produce or grow a cell, group of cells, or organism from a single original cell. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |

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| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Consumer:** | An organism that feeds on other organisms for food. |
| **Cytoplasm:** | The material that surrounds organelles and inside the cell membrane. |
| **Decomposer :** | Any organism that feeds or obtains nutrients by breaking down organic matter from dead organisms. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Diversity:** | The different species in a given area or specific period of time. |
| **DNA:** | Deoxyribonucleic acid; a nucleic acid that is genetic material; present in all organisms. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| **Evolution :** | A theory that the various types of species arise from pre-existing species and that distinguishable characteristics are due to modifications through successive generations. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Fossil:** | A whole or part of an organism that has been preserved in sedimentary rock. |
| **Fungus:** | A kingdom of eukaryotic organisms that reproduce by spores and have cell walls that contain chitin, examples include the mushrooms, molds, yeasts, and mildews. |
| **Genetic:** | Affecting or determined by genes. |
| **Genotype:** | The genetic information contained in a cell, an organism, or an individual. |
| **Heredity:** | The passage of biological traits or characteristics from parents to offspring through the inheritance of genes. |
| **Homeostasis:** | The tendency of an organism or cell to regulate its internal conditions, such as the chemical composition of its body fluids, so as to maintain health and functioning, regardless of outside conditions. |

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| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Meiosis:** | The process of nuclear division in cells during which the number of chromosomes is reduced by half. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Mitochondrion:** | A spherical or elongated organelle in the cytoplasm of nearly all eukaryotic cells that uses enzymes and membranes to make chemical energy available to the cell to make food to usable energy. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Natural selection:** | The theory stating every organism displays slight variations from related organisms, and these variations make an organism more or less suited for survival and reproduction in specific habitats. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |

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| **Organ:** | A structure containing different tissues that are organized to carry out a specific function of the body (e.g., heart, lungs, brain, etc.) |
| **Organelle:** | A differentiated structure within a cell, such as a mitochondrion, vacuole, or chloroplast, that performs a specific function. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Parasite:** | An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host. |
| **Phenotype:** | The observable characteristics of an organism resulting from the interaction of its genetic makeup and its environment. |
| **Photosynthesis:** | A chemical process by which plants use light energy to convert carbon dioxide and water into carbohydrates (sugars). |
| **Producer :** | An organism, usually a plant or bacterium, that produces organic compounds from simple inorganic molecules and energy (typically light energy) from the environment. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Sexual reproduction:** | Reproduction involving the union of male and female gametes producing an offspring with traits from both parents. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tissue:** | Similar cells acting to perform a specific function. |

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| **Vacuole:** | A cavity in the cytoplasm of a cell, bound by a single membrane and containing water, food, or metabolic waste. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Virus:** | A noncellular, usually disease-causing, particle with an outer protein code and a core of genetic material that is capable of growth and replication in living host cells. |

# Course: M/J Comprehensive Science 2 Accelerated Advanced- 2002085

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4318.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 2 Accelerated Advanced |
| **Course Number:** | 2002085 |
| **Course Abbreviated Title:** | M/J COMP SCI 2 ACC ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

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| | measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br><br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (105)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| **HE.7.C.1.4:** | Describe ways to reduce or prevent injuries and adolescent health problems.<br>Remarks/Examples |

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| | Helmet use, seat-belt use, pedestrian safety, unsupervised handling of firearms, and proper use of over-the-counter medications. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.RST.4.10:** | By the end of grade 8, read and comprehend science/technical texts in the grades 6–8 text complexity band independently and proficiently. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the |

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| | topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |

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| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| SC.7.E.6.1: | Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores. |
| SC.7.E.6.2: | Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.7.E.6.3: | Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating. |
| LACC.8.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that connect the ideas of several speakers and |

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| | respond to others' questions and comments with relevant evidence, observations, and ideas.<br>d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented. |
| LACC.8.SL.1.2: | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. |
| LACC.8.SL.1.3: | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| LACC.8.SL.2.4: | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.8.SL.2.5: | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |
| MACC.8.F.2.5: | Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally. |
| MACC.8.G.3.9: | Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.<br><br>Remarks/Examples<br>**Fluency Expectations or Examples of Culminating Standards**<br><br>When students learn to solve problems involving volumes of cones, cylinders, and spheres — together with their previous grade 7 work in angle measure, area, surface area and volume (7.G.2.4–2.6) — they will have acquired a well-developed set of geometric measurement skills. These skills, along with proportional reasoning (7.RP) and multistep numerical problem solving (7.EE.2.3), can be combined and used in flexible ways as part of modeling during high school — not to mention after high school for college and careers. |
| MACC.8.SP.1.4: | Understand that patterns of association can also be seen in bivariate |

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| | categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?* |
| **SC.7.E.6.4:** | Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes. |
| **SC.7.E.6.5:** | Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building. |
| **SC.7.E.6.6:** | Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. |
| **SC.7.E.6.7:** | Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. |
| **SC.7.L.15.1:** | Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species. |
| **SC.7.L.15.2:** | Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. |
| **SC.7.L.15.3:** | Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species. |
| **SC.7.L.16.1:** | Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another.<br>Remarks/Examples |
| | Integrate HE.7.C.1.4. Describe how heredity can affect personal |

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| | health. |
| **SC.7.L.16.2:** | Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees. |
| **SC.7.L.16.3:** | Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis. |
| **SC.7.L.16.4:** | Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the environment.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| **SC.7.L.17.1:** | Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web. |
| **SC.7.L.17.2:** | Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism. |
| **SC.7.L.17.3:** | Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites. |
| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.2:** | Differentiate replication (by others) from repetition (multiple trials). |
| **SC.7.N.1.3:** | Distinguish between an experiment (which must involve the |

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| | identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |
| **SC.7.N.1.7:** | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| **SC.7.N.2.1:** | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| **SC.7.N.3.1:** | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| **SC.7.N.3.2:** | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.7.P.10.1:** | Illustrate that the sun's energy arrives as radiation with a wide range of wavelengths, including infrared, visible, and ultraviolet, and that white light is made up of a spectrum of many different colors. |
| **SC.7.P.10.2:** | Observe and explain that light can be reflected, refracted, and/or absorbed. |
| **SC.7.P.10.3:** | Recognize that light waves, sound waves, and other waves move at different speeds in different materials. |
| **SC.7.P.11.1:** | Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state. |
| **SC.7.P.11.2:** | Investigate and describe the transformation of energy from one form to another. |
| **SC.7.P.11.3:** | Cite evidence to explain that energy cannot be created nor |

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| | destroyed, only changed from one form to another. |
| SC.7.P.11.4: | Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature. |
| SC.8.E.5.1: | Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance. |
| SC.8.E.5.10: | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| SC.8.E.5.11: | Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs. |
| SC.8.E.5.12: | Summarize the effects of space exploration on the economy and culture of Florida. |
| SC.8.E.5.2: | Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars. |
| SC.8.E.5.3: | Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition. |
| SC.8.E.5.4: | Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions. |
| SC.8.E.5.5: | Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). |
| SC.8.E.5.6: | Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics; and |

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| | MACC.K12.MP.7: Look for and make use of structure. |
| **SC.8.E.5.7:** | Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions. |
| **SC.8.E.5.8:** | Compare various historical models of the Solar System, including geocentric and heliocentric.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.E.5.9:** | Explain the impact of objects in space on each other including:<br>1. the Sun on the Earth including seasons and gravitational attraction<br>2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body. |
| **SC.8.L.18.1:** | Describe and investigate the process of photosynthesis, such as the roles of light, carbon dioxide, water and chlorophyll; production of food; release of oxygen. |
| **SC.8.L.18.2:** | Describe and investigate how cellular respiration breaks down food to provide energy and releases carbon dioxide. |
| **SC.8.L.18.3:** | Construct a scientific model of the carbon cycle to show how matter and energy are continuously transferred within and between organisms and their physical environment.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.L.18.4:** | Cite evidence that living systems follow the Laws of Conservation of Mass and Energy. |
| **SC.8.N.1.1:** | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze |

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| | information, make predictions, and defend conclusions. |
| SC.8.N.2.1: | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| SC.8.N.2.2: | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| SC.8.N.3.1: | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.N.3.2: | Explain why theories may be modified but are rarely discarded. |
| SC.8.N.4.1: | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| SC.8.N.4.2: | Explain how political, social, and economic concerns can affect science, and vice versa. |
| SC.8.P.9.1: | Explore the Law of Conservation of Mass by demonstrating and concluding that mass is conserved when substances undergo physical and chemical changes. |
| SC.8.P.9.2: | Differentiate between physical changes and chemical changes. |
| SC.8.P.9.3: | Investigate and describe how temperature influences chemical changes. |
| SC.912.E.6.1: | Describe and differentiate the layers of Earth and the interactions among them.<br>Remarks/Examples<br>Recognize the importance of the study of seismic wave data and how it can be used to determine the internal structure, density |

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| | variations, and dynamic processes between Earth's layers. |
| **SC.912.E.6.2:** | Connect surface features to surface processes that are responsible for their formation.<br>Remarks/Examples |
| | Identify various landforms (e.g. dunes, lakes, sinkholes, aquifers) and describe how they form (erosion, physical/chemical weathering, and deposition). Explain how sea level changes over time have exposed and inundated continental shelves, created and destroyed inland seas, and shaped the surface of the Earth. |
| **SC.912.E.6.3:** | Analyze the scientific theory of plate tectonics and identify related major processes and features as a result of moving plates.<br>Remarks/Examples |
| | Discuss the development of plate tectonic theory, which is derived from the combination of two theories: continental drift and seafloor spreading. Compare and contrast the three primary types of plate boundaries (convergent, divergent, and transform). Explain the origin of geologic features and processes that result from plate tectonics (e.g. earthquakes, volcanoes, trenches, mid-ocean ridges, island arcs and chains, hot spots, earthquake distribution, tsunamis, mountain ranges). |
| **SC.912.L.15.13:** | Describe the conditions required for natural selection, including: overproduction of offspring, inherited variation, and the struggle to survive, which result in differential reproductive success.<br>Remarks/Examples |
| | Annually assessed on Biology EOC. Also assesses SC.912.L.15.14, SC.912.L.15.15, and SC.912.N.1.3. |
| **SC.912.L.15.6:** | Discuss distinguishing characteristics of the domains and kingdoms of living organisms.<br>Remarks/Examples |
| | Annually Assessed on Biology EOC. Also assesses SC.912.L.15.4; SC.912.L.15.5; SC.912.N.1.3; and SC.912.N.1.6. |
| **SC.912.L.16.16:** | Describe the process of meiosis, including independent assortment and crossing over. Explain how reduction division results in the |

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| | formation of haploid gametes or spores. |
| **SC.912.L.16.2:** | Discuss observed inheritance patterns caused by various modes of inheritance, including dominant, recessive, codominant, sex-linked, polygenic, and multiple alleles. |
| **SC.912.L.17.6:** | Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism. |
| **SC.912.L.17.9:** | Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.E.7.1. |
| **SC.912.L.18.7:** | Identify the reactants, products, and basic functions of photosynthesis. |
| **SC.912.L.18.8:** | Identify the reactants, products, and basic functions of aerobic and anaerobic cellular respiration. |
| **SC.912.L.18.9:** | Explain the interrelated nature of photosynthesis and cellular respiration.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.L.18.7; SC.912.L.18.8; SC.912.L.18.10. |
| **SC.912.P.10.1:** | Differentiate among the various forms of energy and recognize that they can be transformed from one form to others.<br>Remarks/Examples<br>Differentiate between kinetic and potential energy. Recognize that energy cannot be created or destroyed, only transformed. Identify examples of transformation of energy: Heat to light in incandescent electric light bulbs; Light to heat in laser drills; Electrical to sound in radios; Sound to electrical in microphones; Electrical to chemical in battery rechargers; Chemical to electrical in dry cells; Mechanical to electrical in generators [power plants]; Nuclear to heat in nuclear reactors; Gravitational potential energy of a falling object is converted to kinetic energy then to heat and sound energy when the object hits the ground. |
| **SC.912.P.10.5:** | Relate temperature to the average molecular kinetic energy.<br>Remarks/Examples |

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| | Recognize that the internal energy of an object includes the energy of random motion of the object's atoms and molecules, often referred to as thermal energy. |
| **SC.912.P.8.11:** | Relate acidity and basicity to hydronium and hydroxyl ion concentration and pH.<br>Remarks/Examples<br>Use experimental data to illustrate and explain the pH scale to characterize acid and base solutions. Compare and contrast the strengths of various common acids and bases. |
| **SC.912.P.8.4:** | Explore the scientific theory of atoms (also known as atomic theory) by describing the structure of atoms in terms of protons, neutrons and electrons, and differentiate among these particles in terms of their mass, electrical charges and locations within the atom.<br>Remarks/Examples<br>Explain that electrons, protons and neutrons are parts of the atom and that the nuclei of atoms are composed of protons and neutrons, which experience forces of attraction and repulsion consistent with their charges and masses.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.912.P.8.5:** | Relate properties of atoms and their position in the periodic table to the arrangement of their electrons.<br>Remarks/Examples<br>Use the periodic table and electron configuration to determine an element's number of valence electrons and its chemical and physical properties. Explain how chemical properties depend almost entirely on the configuration of the outer electron shell. |

## RELATED GLOSSARY TERM DEFINITIONS (100)

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| **Acid:** | A substance that increases the H+ concentration when added to a water solution Acids turn blue litmus paper red, have a pH of less than 7, and their aqueous solutions react with bases and certain metals to form salts. |
| **Aerobic:** | Occurring in the presence of oxygen or requiring oxygen to live. In aerobic respiration, which is the process used by the cells of most organisms, the production of energy from glucose metabolism requires the presence of oxygen. |
| **Anaerobic :** | Occurring in the absence of oxygen or not requiring oxygen to live. Anaerobic bacteria produce energy from food molecules without the presence of oxygen. |
| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Attraction :** | A term used to describe the electric or magnetic force exerted by oppositely charged objects or to describe the gravitational force that pulls objects toward each other. |
| **Base:** | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| **Biotechnology:** | The manipulation (as through genetic engineering) of living organisms or their components to produce useful usually commercial products (as pest resistant crops, new bacterial strains, or novel pharmaceuticals). |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chemical change:** | A reaction or a change in a substance produced by chemical means that results in producing a different chemical. |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Clone:** | To produce genetic material or produce or grow a cell, group of cells, or organism from a single original cell. |
| **Codominant:** | Relating to two alleles of a gene pair in a heterozygote that are both |

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| | fully expressed. |
| **Concentration:** | The relative amount of a particular substance, a solute, or mixture. |
| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Consumer:** | An organism that feeds on other organisms for food. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Current :** | The amount of electric charge flowing past a specified circuit point per unit time. |
| **Decomposer :** | Any organism that feeds or obtains nutrients by breaking down organic matter from dead organisms. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Desertification:** | The transformation of arable or habitable land to desert, as by a change in climate or destructive land use. |
| **Diversity:** | The different species in a given area or specific period of time. |
| **DNA:** | Deoxyribonucleic acid; a nucleic acid that is genetic material; present in all organisms. |
| **Dominance:** | Tendency of certain (dominant) alleles to mask the expression of their corresponding (recessive) alleles. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Earthquake:** | The shaking of the ground caused by a sudden release of energy in Earth's crust. |
| **Eclipse:** | The partial or total blocking of light of one celestial object by another. |
| **Electromagnetic spectrum:** | The entire range of electromagnetic radiation. At one end of the spectrum are gamma rays, which have the shortest wavelengths and high frequencies. At the other end are radio waves, which have the |

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| | longest wavelengths and low frequencies. Visible light is near the center of the spectrum. |
| **Electron:** | A stable elementary particle in the lepton family having a mass at rest of 9.107 × 10^-28 grams and an electric charge of approximately -1.602 × 10^-19 coulombs. Electrons orbit about the positively charged nuclei of atoms in distinct orbitals of different energy levels, called shells. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Evolution :** | A theory that the various types of species arise from pre-existing species and that distinguishable characteristics are due to modifications through successive generations. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Fossil:** | A whole or part of an organism that has been preserved in sedimentary rock. |
| **Frequency:** | The number of cycles or waves per unit time. |
| **Galaxy:** | A large collection of stars, gases, and dust that are part of the universe (e.g., the Milky Way galaxy) bound together by gravitational forces. |
| **Gamete:** | A reproductive cell having the haploid number of chromosomes, especially a mature sperm or egg capable of fusing with a gamete of the opposite sex to produce the fertilized egg. |
| **Genetic:** | Affecting or determined by genes. |
| **Genotype:** | The genetic information contained in a cell, an organism, or an individual. |
| **Geocentric:** | Relating to a model of the solar system or universe having the Earth as the center. |

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| **Gravity:** | The force of attraction between any two objects. |
| **Haploid:** | Having a single set of each chromosome in a cell or cell nucleus. In most animals, only the gametes (reproductive cells) are haploid. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Heliocentric:** | Relating to a model of the solar system or universe having the Sun as the center. |
| **Heredity:** | The passage of biological traits or characteristics from parents to offspring through the inheritance of genes. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Infrared :** | Relating to the invisible part of the electromagnetic spectrum with wavelengths longer than those of visible red light but shorter than those of microwaves. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Lithosphere:** | The outer part of the solid earth composed of rock essentially like that exposed at the surface, consisting of the crust and outermost layer of the mantle, and usually considered to be about 60 miles (100 kilometers) in thickness. |
| **Mass:** | The amount of matter an object contains. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Meiosis:** | The process of nuclear division in cells during which the number of chromosomes is reduced by half. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number |

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| | of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Moon:** | A natural satellite that revolves around a planet. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Natural selection:** | The theory stating every organism displays slight variations from related organisms, and these variations make an organism more or less suited for survival and reproduction in specific habitats. |
| **Neutron:** | A subatomic particle having zero charge, found in the nucleus of an atom. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Offspring:** | The progeny or descendants of an animal or plant considered as a group. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Periodic table:** | A tabular arrangement of the elements according to their atomic numbers so that elements with similar properties are in the same column. |
| **Phenotype:** | The observable characteristics of an organism resulting from the interaction of its genetic makeup and its environment. |
| **Photosynthesis:** | A chemical process by which plants use light energy to convert carbon dioxide and water into carbohydrates (sugars). |
| **Physical change :** | A change of a substance from one form to another without a change in its chemical properties. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |

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| **Plate tectonics:** | Theory of global dynamics in which Earth's crust is divided into a smaller number of large, rigid plates whose movements cause seismic activity along their borders. |
| **Polygenic:** | Any of a group of nonallelic genes that collectively control the inheritance of a quantitative character or modify the expression of a qualitative character. |
| **Producer :** | An organism, usually a plant or bacterium, that produces organic compounds from simple inorganic molecules and energy (typically light energy) from the environment. |
| **Proton:** | A subatomic particle having a positive charge and which is found in the nucleus of an atom. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Radioactive dating:** | Measurement of the amount of radioactive material (usually carbon 14) that an object contains; can be used to estimate the age of the object. |
| **Recessive:** | An allele for a trait that will be masked unless the organism is homozygous for this trait. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Season:** | One of four natural divisions of the year—spring, summer, autumn, and winter—in temperate zones. Each season has its own characteristic weather and lasts approximately three months. The change in the seasons is brought about by the shift in the angle at which the Sun's rays strike the Earth. This angle changes as the Earth orbits in its yearly cycle around the Sun due to the tilt of the Earth's axis. |
| **Sexual reproduction:** | Reproduction involving the union of male and female gametes producing an offspring with traits from both parents. |
| **Solar system:** | A star and all the planets and other bodies that orbit it; the region in space where these bodies move. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |

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| **Sound wave:** | Longitudinal pressure waves in any material medium regardless of whether they constitute audible sound; earthquake waves and ultrasonic waves are sometimes called sound waves. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Superposition:** | The principle that in a group of stratified sedimentary rocks the lowest were the earliest to be deposited. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tide:** | The regular rise and fall in the surface level of the Earth's oceans, seas, and bays caused by the gravitational attraction of the Moon and to a lesser extent of the Sun. |
| **Ultraviolet :** | Relating to electromagnetic radiation having frequencies higher than those of visible light but lower than those of x-rays, approximately 1015 -1016 hertz. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Wavelength:** | The distance between crests of a wave. |

# Course: M/J Comprehensive Science 2, Advanced- 2002080

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4307.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 2, Advanced |
| **Course Number:** | 2002080 |
| **Course Abbreviated Title:** | M/J COMP SCI 2 ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

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| | measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br><br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (76)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| **HE.7.C.1.3:** | Analyze how environmental factors affect personal health.<br>Remarks/Examples |
| | Food refrigeration, appropriate home heating and cooling, |

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| | air/water quality, and garbage/trash collection. |
| **HE.7.C.1.8:** | Explain the likelihood of injury or illness if engaging in unhealthy/risky behaviors.<br>Remarks/Examples<br>Abuse of over-the-counter medications, sexually transmitted diseases and sexually transmitted infections from sexual relationships, injury, or death from unsupervised handling of firearms, and physical/emotional injury, or impact from abusive dating partner. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.* |

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| | a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, |

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| | or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| LACC.7.SL.1.1a: | Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion. |
| LACC.7.SL.1.1b: | Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. |
| LACC.7.SL.1.1c: | Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. |
| LACC.7.SL.1.1d: | Acknowledge new information expressed by others and, when warranted, modify their own views. |
| LACC.7.SL.1.2: | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. |
| LACC.7.SL.1.3: | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |

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| **LACC.7.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.7.SL.2.5:** | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| **MACC.7.SP.2.4:** | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| **MACC.7.SP.3.5:** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| **MACC.8.SP.1.4:** | Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?* |
| **SC.7.E.6.1:** | Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores. |
| **SC.7.E.6.2:** | Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.7.E.6.3:** | Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating. |

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| SC.7.E.6.4: | Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes. |
| SC.7.E.6.5: | Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building. |
| SC.7.E.6.6: | Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. |
| SC.7.E.6.7: | Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. |
| SC.7.L.15.1: | Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species. |
| SC.7.L.15.2: | Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. |
| SC.7.L.15.3: | Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species. |
| SC.7.L.16.1: | Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| SC.7.L.16.2: | Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees. |
| SC.7.L.16.3: | Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis. |
| SC.7.L.16.4: | Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the |

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| | environment.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| **SC.7.L.17.1:** | Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web. |
| **SC.7.L.17.2:** | Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism. |
| **SC.7.L.17.3:** | Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites. |
| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.2:** | Differentiate replication (by others) from repetition (multiple trials). |
| **SC.7.N.1.3:** | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of |

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| | observations of a natural phenomenon on which scientific explanations are based. |
| SC.7.N.1.7: | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| SC.7.N.2.1: | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| SC.7.N.3.1: | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| SC.7.N.3.2: | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.7.P.10.1: | Illustrate that the sun's energy arrives as radiation with a wide range of wavelengths, including infrared, visible, and ultraviolet, and that white light is made up of a spectrum of many different colors. |
| SC.7.P.10.2: | Observe and explain that light can be reflected, refracted, and/or absorbed. |
| SC.7.P.10.3: | Recognize that light waves, sound waves, and other waves move at different speeds in different materials. |
| SC.7.P.11.1: | Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state. |
| SC.7.P.11.2: | Investigate and describe the transformation of energy from one form to another. |
| SC.7.P.11.3: | Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another. |
| SC.7.P.11.4: | Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature. |
| SC.912.E.6.1: | Describe and differentiate the layers of Earth and the interactions among them.<br>Remarks/Examples<br>Recognize the importance of the study of seismic wave data and how it can be used to determine the internal structure, density |

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| | variations, and dynamic processes between Earth's layers. |
| **SC.912.E.6.2:** | Connect surface features to surface processes that are responsible for their formation.<br>Remarks/Examples<br>Identify various landforms (e.g. dunes, lakes, sinkholes, aquifers) and describe how they form (erosion, physical/chemical weathering, and deposition). Explain how sea level changes over time have exposed and inundated continental shelves, created and destroyed inland seas, and shaped the surface of the Earth. |
| **SC.912.E.6.3:** | Analyze the scientific theory of plate tectonics and identify related major processes and features as a result of moving plates.<br>Remarks/Examples<br>Discuss the development of plate tectonic theory, which is derived from the combination of two theories: continental drift and seafloor spreading. Compare and contrast the three primary types of plate boundaries (convergent, divergent, and transform). Explain the origin of geologic features and processes that result from plate tectonics (e.g. earthquakes, volcanoes, trenches, mid-ocean ridges, island arcs and chains, hot spots, earthquake distribution, tsunamis, mountain ranges). |
| **SC.912.L.15.13:** | Describe the conditions required for natural selection, including: overproduction of offspring, inherited variation, and the struggle to survive, which result in differential reproductive success.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.L.15.14, SC.912.L.15.15, and SC.912.N.1.3. |
| **SC.912.L.15.6:** | Discuss distinguishing characteristics of the domains and kingdoms of living organisms.<br>Remarks/Examples<br>Annually Assessed on Biology EOC. Also assesses SC.912.L.15.4; SC.912.L.15.5; SC.912.N.1.3; and SC.912.N.1.6. |
| **SC.912.L.16.16:** | Describe the process of meiosis, including independent assortment and crossing over. Explain how reduction division results in the |

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| | formation of haploid gametes or spores. |
| **SC.912.L.16.2:** | Discuss observed inheritance patterns caused by various modes of inheritance, including dominant, recessive, codominant, sex-linked, polygenic, and multiple alleles. |
| **SC.912.L.17.6:** | Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism. |
| **SC.912.L.17.9:** | Use a food web to identify and distinguish producers, consumers, and decomposers. Explain the pathway of energy transfer through trophic levels and the reduction of available energy at successive trophic levels.<br>Remarks/Examples<br>Annually assessed on Biology EOC. Also assesses SC.912.E.7.1. |
| **SC.912.P.10.1:** | Differentiate among the various forms of energy and recognize that they can be transformed from one form to others.<br>Remarks/Examples<br>Differentiate between kinetic and potential energy. Recognize that energy cannot be created or destroyed, only transformed. Identify examples of transformation of energy: Heat to light in incandescent electric light bulbs; Light to heat in laser drills; Electrical to sound in radios; Sound to electrical in microphones; Electrical to chemical in battery rechargers; Chemical to electrical in dry cells; Mechanical to electrical in generators [power plants]; Nuclear to heat in nuclear reactors; Gravitational potential energy of a falling object is converted to kinetic energy then to heat and sound energy when the object hits the ground. |
| **SC.912.P.10.5:** | Relate temperature to the average molecular kinetic energy.<br>Remarks/Examples<br>Recognize that the internal energy of an object includes the energy of random motion of the object's atoms and molecules, often referred to as thermal energy. |

## RELATED GLOSSARY TERM DEFINITIONS (67)

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| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Biotechnology:** | The manipulation (as through genetic engineering) of living organisms or their components to produce useful usually commercial products (as pest resistant crops, new bacterial strains, or novel pharmaceuticals). |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Clone:** | To produce genetic material or produce or grow a cell, group of cells, or organism from a single original cell. |
| **Codominant:** | Relating to two alleles of a gene pair in a heterozygote that are both fully expressed. |
| **Consumer:** | An organism that feeds on other organisms for food. |
| **Current :** | The amount of electric charge flowing past a specified circuit point per unit time. |
| **Decomposer :** | Any organism that feeds or obtains nutrients by breaking down organic matter from dead organisms. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Desertification:** | The transformation of arable or habitable land to desert, as by a change in climate or destructive land use. |

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| **Diversity:** | The different species in a given area or specific period of time. |
| **DNA:** | Deoxyribonucleic acid; a nucleic acid that is genetic material; present in all organisms. |
| **Dominance:** | Tendency of certain (dominant) alleles to mask the expression of their corresponding (recessive) alleles. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Earthquake:** | The shaking of the ground caused by a sudden release of energy in Earth's crust. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Evolution :** | A theory that the various types of species arise from pre-existing species and that distinguishable characteristics are due to modifications through successive generations. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Fossil:** | A whole or part of an organism that has been preserved in sedimentary rock. |
| **Gamete:** | A reproductive cell having the haploid number of chromosomes, especially a mature sperm or egg capable of fusing with a gamete of the opposite sex to produce the fertilized egg. |
| **Genetic:** | Affecting or determined by genes. |
| **Genotype:** | The genetic information contained in a cell, an organism, or an individual. |
| **Haploid:** | Having a single set of each chromosome in a cell or cell nucleus. In most animals, only the gametes (reproductive cells) are haploid. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Heredity:** | The passage of biological traits or characteristics from parents to offspring through the inheritance of genes. |

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| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Infrared :** | Relating to the invisible part of the electromagnetic spectrum with wavelengths longer than those of visible red light but shorter than those of microwaves. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Lithosphere:** | The outer part of the solid earth composed of rock essentially like that exposed at the surface, consisting of the crust and outermost layer of the mantle, and usually considered to be about 60 miles (100 kilometers) in thickness. |
| **Meiosis:** | The process of nuclear division in cells during which the number of chromosomes is reduced by half. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Natural selection:** | The theory stating every organism displays slight variations from related organisms, and these variations make an organism more or less suited for survival and reproduction in specific habitats. |
| **Observation :** | What one has observed using senses or instruments. |

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| **Offspring:** | The progeny or descendants of an animal or plant considered as a group. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Phenotype:** | The observable characteristics of an organism resulting from the interaction of its genetic makeup and its environment. |
| **Plate tectonics:** | Theory of global dynamics in which Earth's crust is divided into a smaller number of large, rigid plates whose movements cause seismic activity along their borders. |
| **Polygenic:** | Any of a group of nonallelic genes that collectively control the inheritance of a quantitative character or modify the expression of a qualitative character. |
| **Producer :** | An organism, usually a plant or bacterium, that produces organic compounds from simple inorganic molecules and energy (typically light energy) from the environment. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Radioactive dating:** | Measurement of the amount of radioactive material (usually carbon 14) that an object contains; can be used to estimate the age of the object. |
| **Recessive:** | An allele for a trait that will be masked unless the organism is homozygous for this trait. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Sexual reproduction:** | Reproduction involving the union of male and female gametes producing an offspring with traits from both parents. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Sound wave:** | Longitudinal pressure waves in any material medium regardless of whether they constitute audible sound; earthquake waves and ultrasonic waves are sometimes called sound waves. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Sun:** | The closest star to Earth and the center of our solar system. |

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| **Superposition:** | The principle that in a group of stratified sedimentary rocks the lowest were the earliest to be deposited. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Ultraviolet :** | Relating to electromagnetic radiation having frequencies higher than those of visible light but lower than those of x-rays, approximately 1015 -1016 hertz. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Wavelength:** | The distance between crests of a wave. |

# Course: M/J Comprehensive Science 2-2002070

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4393.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 2 |
| **Course Number:** | 2002070 |
| **Course Abbreviated Title:** | M/J COMP SCI 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

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| | measurement error and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br><br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (61)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| HE.7.C.1.3: | Analyze how environmental factors affect personal health. |

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| | Remarks/Examples<br>Some examples may include food refrigeration, appropriate home heating and cooling, water quality, garbage/trash collection. |
| **HE.7.C.1.8:** | Classify infectious agents and their modes of transmission to the human body.<br>Remarks/Examples<br>Some examples may include HIV by sexual transmission and/or shared needles, etc.; Lyme's disease by vectors; staphylococcus by direct/indirect contact. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content*. |

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| | a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, |

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| | or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| SC.7.E.6.4: | Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes. |
| SC.7.E.6.5: | Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building. |
| LACC.7.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. |

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| | c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and, when warranted, modify their own views. |
| **LACC.7.SL.1.2:** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. |
| **LACC.7.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |
| **LACC.7.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.7.SL.2.5:** | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| **MACC.7.SP.2.4:** | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| **MACC.7.SP.3.5:** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| **SC.7.E.6.1:** | Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores. |
| **SC.7.E.6.2:** | Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).<br>Remarks/Examples |
| | CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |

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| SC.7.E.6.3: | Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating. |
| SC.7.E.6.6: | Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. |
| SC.7.E.6.7: | Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. |
| SC.7.L.15.1: | Recognize that fossil evidence is consistent with the scientific theory of evolution that living things evolved from earlier species. |
| SC.7.L.15.2: | Explore the scientific theory of evolution by recognizing and explaining ways in which genetic variation and environmental factors contribute to evolution by natural selection and diversity of organisms. |
| SC.7.L.15.3: | Explore the scientific theory of evolution by relating how the inability of a species to adapt within a changing environment may contribute to the extinction of that species. |
| SC.7.L.16.1: | Understand and explain that every organism requires a set of instructions that specifies its traits, that this hereditary information (DNA) contains genes located in the chromosomes of each cell, and that heredity is the passage of these instructions from one generation to another.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal health. |
| SC.7.L.16.2: | Determine the probabilities for genotype and phenotype combinations using Punnett Squares and pedigrees. |
| SC.7.L.16.3: | Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis. |
| SC.7.L.16.4: | Recognize and explore the impact of biotechnology (cloning, genetic engineering, artificial selection) on the individual, society and the environment.<br>Remarks/Examples<br>Integrate HE.7.C.1.4. Describe how heredity can affect personal |

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| | health. |
| **SC.7.L.17.1:** | Explain and illustrate the roles of and relationships among producers, consumers, and decomposers in the process of energy transfer in a food web. |
| **SC.7.L.17.2:** | Compare and contrast the relationships among organisms such as mutualism, predation, parasitism, competition, and commensalism. |
| **SC.7.L.17.3:** | Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites. |
| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.2:** | Differentiate replication (by others) from repetition (multiple trials). |
| **SC.7.N.1.3:** | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |

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| SC.7.N.1.7: | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |
| SC.7.N.2.1: | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| SC.7.N.3.1: | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| SC.7.N.3.2: | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.7.P.10.1: | Illustrate that the sun's energy arrives as radiation with a wide range of wavelengths, including infrared, visible, and ultraviolet, and that white light is made up of a spectrum of many different colors. |
| SC.7.P.10.2: | Observe and explain that light can be reflected, refracted, and/or absorbed. |
| SC.7.P.10.3: | Recognize that light waves, sound waves, and other waves move at different speeds in different materials. |
| SC.7.P.11.1: | Recognize that adding heat to or removing heat from a system may result in a temperature change and possibly a change of state. |
| SC.7.P.11.2: | Investigate and describe the transformation of energy from one form to another. |
| SC.7.P.11.3: | Cite evidence to explain that energy cannot be created nor destroyed, only changed from one form to another. |
| SC.7.P.11.4: | Observe and describe that heat flows in predictable ways, moving from warmer objects to cooler ones until they reach the same temperature. |

## RELATED GLOSSARY TERM DEFINITIONS (53)

| | |
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| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Biotechnology:** | The manipulation (as through genetic engineering) of living organisms or their components to produce useful usually commercial products (as pest resistant crops, new bacterial strains, or novel pharmaceuticals). |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Clone:** | To produce genetic material or produce or grow a cell, group of cells, or organism from a single original cell. |
| **Consumer:** | An organism that feeds on other organisms for food. |
| **Current :** | The amount of electric charge flowing past a specified circuit point per unit time. |
| **Decomposer :** | Any organism that feeds or obtains nutrients by breaking down organic matter from dead organisms. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Desertification:** | The transformation of arable or habitable land to desert, as by a change in climate or destructive land use. |
| **Diversity:** | The different species in a given area or specific period of time. |
| **DNA:** | Deoxyribonucleic acid; a nucleic acid that is genetic material; present in all organisms. |
| **Earthquake:** | The shaking of the ground caused by a sudden release of energy in Earth's crust. |
| **Energy:** | The capacity to do work. |
| **Environment:** | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |

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| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Evolution :** | A theory that the various types of species arise from pre-existing species and that distinguishable characteristics are due to modifications through successive generations. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Fossil:** | A whole or part of an organism that has been preserved in sedimentary rock. |
| **Genetic:** | Affecting or determined by genes. |
| **Genotype:** | The genetic information contained in a cell, an organism, or an individual. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Heredity:** | The passage of biological traits or characteristics from parents to offspring through the inheritance of genes. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Infrared :** | Relating to the invisible part of the electromagnetic spectrum with wavelengths longer than those of visible red light but shorter than those of microwaves. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Lithosphere:** | The outer part of the solid earth composed of rock essentially like that exposed at the surface, consisting of the crust and outermost layer of the mantle, and usually considered to be about 60 miles (100 kilometers) in thickness. |
| **Meiosis:** | The process of nuclear division in cells during which the number of |

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| | chromosomes is reduced by half. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Natural selection:** | The theory stating every organism displays slight variations from related organisms, and these variations make an organism more or less suited for survival and reproduction in specific habitats. |
| **Observation :** | What one has observed using senses or instruments. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Phenotype:** | The observable characteristics of an organism resulting from the interaction of its genetic makeup and its environment. |
| **Plate tectonics:** | Theory of global dynamics in which Earth's crust is divided into a smaller number of large, rigid plates whose movements cause seismic activity along their borders. |
| **Producer :** | An organism, usually a plant or bacterium, that produces organic compounds from simple inorganic molecules and energy (typically light energy) from the environment. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Radioactive dating:** | Measurement of the amount of radioactive material (usually carbon 14) that an object contains; can be used to estimate the age of the object. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Sexual reproduction:** | Reproduction involving the union of male and female gametes producing an offspring with traits from both parents. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Sound wave:** | Longitudinal pressure waves in any material medium regardless of whether they constitute audible sound; earthquake waves and |

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| | ultrasonic waves are sometimes called sound waves. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Superposition:** | The principle that in a group of stratified sedimentary rocks the lowest were the earliest to be deposited. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Ultraviolet :** | Relating to electromagnetic radiation having frequencies higher than those of visible light but lower than those of x-rays, approximately 1015 -1016 hertz. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Wavelength:** | The distance between crests of a wave. |

# Course: M/J Comprehensive Science 1 Accelerated Advanced- 2002055

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4386.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 1 Accelerated Advanced |
| **Course Number:** | 2002055 |
| **Course Abbreviated Title:** | M/J COMP SCI 1 ACC ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand |

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| | measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (88)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| **HE.7.C.1.3:** | Analyze how environmental factors affect personal health.<br>Remarks/Examples |
| | Some examples may include food refrigeration, appropriate home |

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| | heating and cooling, water quality, garbage/trash collection. |
| **HE.7.C.1.8:** | Classify infectious agents and their modes of transmission to the human body.<br>Remarks/Examples<br>Some examples may include HIV by sexual transmission and/or shared needles, etc.; Lyme's disease by vectors; staphylococcus by direct/indirect contact. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, |

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| | and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| LACC.68.WHST.1.2: | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| LACC.68.WHST.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| LACC.68.WHST.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish |

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| | writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| SC.6.E.6.2: | Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.<br>Remarks/Examples<br>Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1. |
| SC.6.E.7.1: | Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system. |
| LACC.7.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that elicit elaboration and respond to others' |

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| | questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and, when warranted, modify their own views. |
| **LACC.7.SL.1.2:** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. |
| **LACC.7.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |
| **LACC.7.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.7.SL.2.5:** | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| **MACC.7.SP.2.4:** | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| **MACC.7.SP.3.5:** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| **MACC.8.SP.1.4:** | Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?* |

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| **SC.6.E.6.1:** | Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition. |
| **SC.6.E.7.2:** | Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.3:** | Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; MACC.K12.MP.6: Attend to precision; and, MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.4:** | Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere. |
| **SC.6.E.7.5:** | Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.6:** | Differentiate between weather and climate. |
| **SC.6.E.7.7:** | Investigate how natural disasters have affected human life in Florida. |
| **SC.6.E.7.8:** | Describe ways human beings protect themselves from hazardous weather and sun exposure. |
| **SC.6.E.7.9:** | Describe how the composition and structure of the atmosphere protects life and insulates the planet.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of |

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| | structure. |
| **SC.6.L.14.1:** | Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.L.14.2:** | Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life. |
| **SC.6.L.14.3:** | Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing. |
| **SC.6.L.14.4:** | Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.L.14.5:** | Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis. |
| **SC.6.L.14.6:** | Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.<br>Remarks/Examples<br>Integrate HE.6.C.1.8. Explain how body systems are impacted by hereditary factors and infectious agents. |
| **SC.6.L.15.1:** | Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains. |
| **SC.6.N.1.1:** | Define a problem from the sixth grade curriculum, use appropriate |

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| | reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.6.N.1.2:** | Explain why scientific investigations should be replicable. |
| **SC.6.N.1.3:** | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007). |
| **SC.6.N.1.4:** | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| **SC.6.N.1.5:** | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, LACC.68.WHST.3.9. |
| **SC.6.N.2.1:** | Distinguish science from other activities involving thought.<br>Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |
| **SC.6.N.2.2:** | Explain that scientific knowledge is durable because it is open to |

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| | change as new evidence or interpretations are encountered. |
| SC.6.N.2.3: | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| SC.6.N.3.1: | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| SC.6.N.3.2: | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| SC.6.N.3.3: | Give several examples of scientific laws. |
| SC.6.N.3.4: | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.6.P.11.1: | Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa. |
| SC.6.P.12.1: | Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| SC.6.P.13.1: | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |
| SC.6.P.13.2: | Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are. |
| SC.6.P.13.3: | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| SC.8.N.1.2: | Design and conduct a study using repeated trials and replication. |

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| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.1:** | Explore the scientific theory of atoms (also known as atomic theory) by using models to explain the motion of particles in solids, liquids, and gases.<br>Remarks/Examples<br>Recognize that matter is composed of discrete units called atoms and atoms are composed of sub-atomic particles called protons, neutrons, and electrons. Solid is the state in which intermolecular attractions keep the molecules in fixed spatial relationships. Liquid is the state in which intermolecular attractions keep molecules in proximity, but not in fixed relationships. Gas is the state in which molecules are comparatively separated and intermolecular attractions have relatively little effect on their respective motions.<br><br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.2:** | Differentiate between weight and mass recognizing that weight is the amount of gravitational pull on an object and is distinct from, though proportional to, mass. |
| **SC.8.P.8.3:** | Explore and describe the densities of various materials through measurement of their masses and volumes.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |

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| **SC.8.P.8.4:** | Classify and compare substances on the basis of characteristic physical properties that can be demonstrated or measured; for example, density, thermal or electrical conductivity, solubility, magnetic properties, melting and boiling points, and know that these properties are independent of the amount of the sample.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.8.P.8.5:** | Recognize that there are a finite number of elements and that their atoms combine in a multitude of ways to produce compounds that make up all of the living and nonliving things that we encounter.<br>Remarks/Examples<br>Demonstrate with atomic models how atoms can combine in many ways. Explain why there are many, but limited, combinations. Use models to demonstrate the conservation of mass in modeled chemical reactions. |
| **SC.8.P.8.6:** | Recognize that elements are grouped in the periodic table according to similarities of their properties. |
| **SC.8.P.8.7:** | Explore the scientific theory of atoms (also known as atomic theory) by recognizing that atoms are the smallest unit of an element and are composed of sub-atomic particles (electrons surrounding a nucleus containing protons and neutrons).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.P.8.8:** | Identify basic examples of and compare and classify the properties of compounds, including acids, bases, and salts. |
| **SC.8.P.8.9:** | Distinguish among mixtures (including solutions) and pure substances.<br>Remarks/Examples<br>Pure substances include elements and compounds. Mixtures are classified as heterogeneous (mixtures) or homogeneous (solutions). Methods for separating mixtures include: distillation, chromatography, reverse osmosis, diffusion through semi-permeable membranes. |

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| SC.912.E.5.4: | Explain the physical properties of the Sun and its dynamic nature and connect them to conditions and events on Earth.<br>Remarks/Examples<br>Describe the physical properties of the Sun (sunspot cycles, solar flares, prominences, layers of the Sun, coronal mass ejections, and nuclear reactions) and the impact of the Sun as the main source of external energy for the Earth. |
| SC.912.E.7.3: | Differentiate and describe the various interactions among Earth systems, including: atmosphere, hydrosphere, cryosphere, geosphere, and biosphere.<br>Remarks/Examples<br>Interactions include transfer of energy (biogeochemical cycles, water cycle, ground and surface waters, photosynthesis, radiation, plate tectonics, conduction, and convection), storms, winds, waves, erosion, currents, deforestation and wildfires, hurricanes, tsunamis, volcanoes. |
| SC.912.E.7.5: | Predict future weather conditions based on present observations and conceptual models and recognize limitations and uncertainties of such predictions.<br>Remarks/Examples<br>Use models, weather maps and other tools to predict weather conditions and differentiate between accuracy of short-range and long-range weather forecasts. |
| SC.912.E.7.6: | Relate the formation of severe weather to the various physical factors.<br>Remarks/Examples<br>Identify the causes of severe weather. Compare and contrast physical factors that affect the formation of severe weather events (e.g. hurricanes, tornados, flash floods, thunderstorms, and drought). |
| SC.912.L.14.2: | Relate structure to function for the components of plant and animal cells. Explain the role of cell membranes as a highly selective barrier (passive and active transport). |
| SC.912.L.14.3: | Compare and contrast the general structures of plant and animal |

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| | cells. Compare and contrast the general structures of prokaryotic and eukaryotic cells.<br>Remarks/Examples<br>Annually Assessed on Biology EOC. Also assesses SC.912.L.14.2. |
| **SC.912.L.16.14:** | Describe the cell cycle, including the process of mitosis. Explain the role of mitosis in the formation of new cells and its importance in maintaining chromosome number during asexual reproduction. |
| **SC.912.P.10.4:** | Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter. |
| **SC.912.P.8.1:** | Differentiate among the four states of matter.<br>Remarks/Examples<br>Differentiate among the four states of matter (solid, liquid, gas and plasma) in terms of energy, particle motion, and phase transitions. (Note: Currently five states of matter have been identified.) |
| **SC.912.P.8.2:** | Differentiate between physical and chemical properties and physical and chemical changes of matter.<br>Remarks/Examples<br>Discuss volume, compressibility, density, conductivity, malleability, reactivity, molecular composition, freezing, melting and boiling points. Describe simple laboratory techniques that can be used to separate homogeneous and heterogeneous mixtures (e.g. filtration, distillation, chromatography, evaporation). |
| **SC.912.P.8.7:** | Interpret formula representations of molecules and compounds in terms of composition and structure.<br>Remarks/Examples<br>Write chemical formulas for simple covalent (HCl, SO2, CO2, and CH4), ionic (Na+ + Cl− → NaCl) and molecular (O2, H2O) compounds. Predict the formulas of ionic compounds based on the number of valence electrons and the charges on the ions. |

## RELATED GLOSSARY TERM DEFINITIONS (83)

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| **Acid:** | A substance that increases the H+ concentration when added to a water solution Acids turn blue litmus paper red, have a pH of less than 7, and their aqueous solutions react with bases and certain metals to form salts. |
| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Atmosphere:** | The layers of gas that surround Earth, other planets, or stars. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Bacteria:** | Any of a large group of one-celled organisms that lack a cell nucleus, reproduce by fission or by forming spores, and in some cases cause disease. |
| **Base:** | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| **Biosphere:** | The part of the earth and its atmosphere in which living organisms exist or that is capable of supporting life. |
| **Boil:** | To change from a liquid to a vapor by the application of heat. |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chemical change:** | A reaction or a change in a substance produced by chemical means that results in producing a different chemical. |
| **Chloroplast:** | A plastid in most cells of most plants that contains chlorophylls and carotenoid pigments and produces glucose through photosynthesis. |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Compound:** | A substance made up of at least two different elements held together by chemical bonds that can only be broken down into |

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| | elements by chemical processes. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Conductivity:** | The ability or power to conduct or transmit heat, electricity, or sound. |
| **Conservation of Mass:** | The principle that mass cannot be created or destroyed; also conservation of matter. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Cytoplasm:** | The material that surrounds organelles and inside the cell membrane. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Delta:** | A usually triangular mass of sediment, especially silt and sand, deposited at the mouth of a river. Deltas form when a river flows into a body of standing water, such as a sea or lake, and deposits large quantities of sediment. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Electron:** | A stable elementary particle in the lepton family having a mass at rest of 9.107 × 10^-28 grams and an electric charge of approximately -1.602 × 10^-19 coulombs. Electrons orbit about the positively charged nuclei of atoms in distinct orbitals of different energy levels, called shells. |
| **Energy:** | The capacity to do work. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Evaporation:** | The process by which a liquid is converted to its vapor phase by heating the liquid. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when |

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| | unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Freeze:** | To pass from the liquid to the solid state by loss of heat from the substance/system. |
| **Fungus:** | A kingdom of eukaryotic organisms that reproduce by spores and have cell walls that contain chitin, examples include the mushrooms, molds, yeasts, and mildews. |
| **Gas:** | One of the fundamental states of matter in which the molecules do not have a fixed volume or shape. |
| **Geosphere:** | The solid part of the earth consisting of the crust and outer mantle. |
| **Glacier:** | A huge mass of ice slowly flowing over a land mass, formed from compacted snow in an area where snow accumulation exceeds melting and sublimation. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Homeostasis:** | The tendency of an organism or cell to regulate its internal conditions, such as the chemical composition of its body fluids, so as to maintain health and functioning, regardless of outside conditions. |
| **Humidity:** | The amount of water vapor in the atmosphere, usually expressed as either absolute humidity or relative humidity. |
| **Hydrosphere:** | All of the Earth's water, including surface water (water in oceans, lakes, and rivers), groundwater (water in soil and beneath the Earth's surface), snowcover, ice, and water in the atmosphere, including water vapor. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but |

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| | no definite shape. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Melt:** | To be changed from a solid to a liquid state especially by the application of heat. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Mitochondrion:** | A spherical or elongated organelle in the cytoplasm of nearly all eukaryotic cells that uses enzymes and membranes to make chemical energy available to the cell to make food to usable energy. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Neutron:** | A subatomic particle having zero charge, found in the nucleus of an atom. |
| **Nuclear reaction:** | A process, such as fission, fusion, or radioactive decay, in which the structure of an atomic nucleus is altered through release of energy or mass or by being broken apart. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Organ:** | A structure containing different tissues that are organized to carry |

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| | out a specific function of the body (e.g., heart, lungs, brain, etc.) |
| **Organelle:** | A differentiated structure within a cell, such as a mitochondrion, vacuole, or chloroplast, that performs a specific function. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Parasite:** | An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host. |
| **Periodic table:** | A tabular arrangement of the elements according to their atomic numbers so that elements with similar properties are in the same column. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Potential energy:** | Energy stored in a physical system due to the object's configuration and position. |
| **Precipitation:** | In meteorology, a form of water, such as rain, snow, or sleet that condenses from the atmosphere, becomes too heavy to remain suspended, and falls to the Earth's surface. |
| **Proton:** | A subatomic particle having a positive charge and which is found in the nucleus of an atom. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |
| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Solubility:** | The ability or tendency of one substance to dissolve in another at a given temperature and pressure. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |

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| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tissue:** | Similar cells acting to perform a specific function. |
| **Vacuole:** | A cavity in the cytoplasm of a cell, bound by a single membrane and containing water, food, or metabolic waste. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Virus:** | A noncellular, usually disease-causing, particle with an outer protein code and a core of genetic material that is capable of growth and replication in living host cells. |
| **Volume:** | A measure of the amount of space an object takes up; also the loudness of a sound or signal. |
| **Water cycle:** | The path water takes as it is being cycled through the environment, including condensation, evaporation, and precipitation. |
| **Weight:** | The force with which a body is attracted to Earth or another celestial body, equal to the product of the object's mass and the acceleration of gravity. |

# Course: M/J Comprehensive Science 1, Advanced- 2002050

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4381.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 1, Advanced |
| **Course Number:** | 2002050 |
| **Course Abbreviated Title:** | M/J COMP SCI 1 ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all |

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| | subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (73)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| **HE.6.C.1.3:** | Identify environmental factors that affect personal health.<br>Remarks/Examples |
| | Some examples may include air quality, availability of sidewalks, contaminated food, and road hazards. |
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| **HE.6.C.1.8:** | Explain how body systems are impacted by hereditary factors and infectious agents.<br>Remarks/Examples |
| | Some examples may include cystic fibrosis affects respiratory and |

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| | digestive systems, sickle cell anemia affects the circulatory system, influenza affects the respiratory system. |
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| LACC.6.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.<br>c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.<br>d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. |
| LACC.6.SL.1.2: | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| LACC.6.SL.1.3: | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |
| LACC.6.SL.2.4: | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.6.SL.2.5: | Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information. |
| LACC.68.RST.1.1: | Cite specific textual evidence to support analysis of science and technical texts. |
| LACC.68.RST.1.2: | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |

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| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes. |

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| | a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.68.WHST.3.7:** | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |

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| **LACC.68.WHST.4.10:** | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| **MACC.6.EE.3.9:** | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.* |
| **MACC.6.SP.1.3:** | Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. |
| **MACC.6.SP.2.4:** | Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br><br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. |
| **MACC.7.SP.2.4:** | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| **MACC.7.SP.3.5:** | Understand that the probability of a chance event is a number |

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| | between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| **SC.6.E.6.1:** | Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition. |
| **SC.6.E.6.2:** | Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.<br>Remarks/Examples<br>Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1. |
| **SC.6.E.7.1:** | Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system. |
| **SC.6.E.7.2:** | Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.3:** | Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; MACC.K12.MP.6: Attend to precision; and, MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.4:** | Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere. |
| **SC.6.E.7.5:** | Explain how energy provided by the sun influences global patterns of |

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| | atmospheric movement and the temperature differences between air, water, and land.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.E.7.6: | Differentiate between weather and climate. |
| SC.6.E.7.7: | Investigate how natural disasters have affected human life in Florida. |
| SC.6.E.7.8: | Describe ways human beings protect themselves from hazardous weather and sun exposure. |
| SC.6.E.7.9: | Describe how the composition and structure of the atmosphere protects life and insulates the planet.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.L.14.1: | Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.L.14.2: | Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life. |
| SC.6.L.14.3: | Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing. |
| SC.6.L.14.4: | Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |

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| **SC.6.L.14.5:** | Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis. |
| **SC.6.L.14.6:** | Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.<br>Remarks/Examples<br>Integrate HE.6.C.1.8. Explain how body systems are impacted by hereditary factors and infectious agents. |
| **SC.6.L.15.1:** | Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains. |
| **SC.6.N.1.1:** | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.6.N.1.2:** | Explain why scientific investigations should be replicable. |
| **SC.6.N.1.3:** | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007). |
| **SC.6.N.1.4:** | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |

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| **SC.6.N.1.5:** | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, LACC.68.WHST.3.9. |
| **SC.6.N.2.1:** | Distinguish science from other activities involving thought.<br>Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |
| **SC.6.N.2.2:** | Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered. |
| **SC.6.N.2.3:** | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| **SC.6.N.3.1:** | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| **SC.6.N.3.2:** | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| **SC.6.N.3.3:** | Give several examples of scientific laws. |
| **SC.6.N.3.4:** | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.6.P.11.1:** | Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa. |
| **SC.6.P.12.1:** | Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship. |

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| | Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.6.P.13.1:** | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |
| **SC.6.P.13.2:** | Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are. |
| **SC.6.P.13.3:** | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| **SC.912.E.7.3:** | Differentiate and describe the various interactions among Earth systems, including: atmosphere, hydrosphere, cryosphere, geosphere, and biosphere.<br>Remarks/Examples<br>Interactions include transfer of energy (biogeochemical cycles, water cycle, ground and surface waters, photosynthesis, radiation, plate tectonics, conduction, and convection), storms, winds, waves, erosion, currents, deforestation and wildfires, hurricanes, tsunamis, volcanoes. |
| **SC.912.E.7.5:** | Predict future weather conditions based on present observations and conceptual models and recognize limitations and uncertainties of such predictions.<br>Remarks/Examples<br>Use models, weather maps and other tools to predict weather conditions and differentiate between accuracy of short-range and long-range weather forecasts. |
| **SC.912.E.7.6:** | Relate the formation of severe weather to the various physical factors.<br>Remarks/Examples<br>Identify the causes of severe weather. Compare and contrast physical factors that affect the formation of severe weather events (e.g. hurricanes, tornados, flash floods, thunderstorms, and drought). |

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| SC.912.L.14.2: | Relate structure to function for the components of plant and animal cells. Explain the role of cell membranes as a highly selective barrier (passive and active transport). |
| SC.912.L.14.3: | Compare and contrast the general structures of plant and animal cells. Compare and contrast the general structures of prokaryotic and eukaryotic cells.<br>Remarks/Examples<br>Annually Assessed on Biology EOC. Also assesses SC.912.L.14.2. |
| SC.912.L.16.14: | Describe the cell cycle, including the process of mitosis. Explain the role of mitosis in the formation of new cells and its importance in maintaining chromosome number during asexual reproduction. |
| SC.912.P.10.4: | Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter. |

## RELATED GLOSSARY TERM DEFINITIONS (58)

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| **Asexual reproduction:** | A form of reproduction in which new individuals are formed without the involvement of gametes. |
| **Atmosphere:** | The layers of gas that surround Earth, other planets, or stars. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Bacteria:** | Any of a large group of one-celled organisms that lack a cell nucleus, reproduce by fission or by forming spores, and in some cases cause disease. |
| **Biosphere:** | The part of the earth and its atmosphere in which living organisms exist or that is capable of supporting life. |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which |

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| | in some cells, is surrounded by a cell wall |
| **Chloroplast:** | A plastid in most cells of most plants that contains chlorophylls and carotenoid pigments and produces glucose through photosynthesis. |
| **Chromosome:** | A structure in living cells that consists of a single molecule of DNA bonded to various proteins and that carries the genes determining heredity. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Cytoplasm:** | The material that surrounds organelles and inside the cell membrane. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Delta:** | A usually triangular mass of sediment, especially silt and sand, deposited at the mouth of a river. Deltas form when a river flows into a body of standing water, such as a sea or lake, and deposits large quantities of sediment. |
| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Energy:** | The capacity to do work. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Fungus:** | A kingdom of eukaryotic organisms that reproduce by spores and have cell walls that contain chitin, examples include the mushrooms, molds, yeasts, and mildews. |
| **Geosphere:** | The solid part of the earth consisting of the crust and outer mantle. |
| **Glacier:** | A huge mass of ice slowly flowing over a land mass, formed from compacted snow in an area where snow accumulation exceeds |

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| | melting and sublimation. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Homeostasis:** | The tendency of an organism or cell to regulate its internal conditions, such as the chemical composition of its body fluids, so as to maintain health and functioning, regardless of outside conditions. |
| **Humidity:** | The amount of water vapor in the atmosphere, usually expressed as either absolute humidity or relative humidity. |
| **Hydrosphere:** | All of the Earth's water, including surface water (water in oceans, lakes, and rivers), groundwater (water in soil and beneath the Earth's surface), snowcover, ice, and water in the atmosphere, including water vapor. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |
| **Matter:** | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Mitochondrion:** | A spherical or elongated organelle in the cytoplasm of nearly all eukaryotic cells that uses enzymes and membranes to make chemical energy available to the cell to make food to usable energy. |
| **Mitosis:** | A process of nuclear division in eukaryotic cells during which the nucleus of a cell divides into two nuclei, each with the same number of chromosomes. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific |

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| | models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Organ:** | A structure containing different tissues that are organized to carry out a specific function of the body (e.g., heart, lungs, brain, etc.) |
| **Organelle:** | A differentiated structure within a cell, such as a mitochondrion, vacuole, or chloroplast, that performs a specific function. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Parasite:** | An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Potential energy:** | Energy stored in a physical system due to the object's configuration and position. |
| **Precipitation:** | In meteorology, a form of water, such as rain, snow, or sleet that condenses from the atmosphere, becomes too heavy to remain suspended, and falls to the Earth's surface. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural |

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| | phenomena. |
| **Tissue:** | Similar cells acting to perform a specific function. |
| **Vacuole:** | A cavity in the cytoplasm of a cell, bound by a single membrane and containing water, food, or metabolic waste. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Virus:** | A noncellular, usually disease-causing, particle with an outer protein code and a core of genetic material that is capable of growth and replication in living host cells. |
| **Water cycle:** | The path water takes as it is being cycled through the environment, including condensation, evaporation, and precipitation. |

# Course: M/J Comprehensive Science 1-2002040

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4378.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive Science 1 |
| **Course Number:** | 2002040 |
| **Course Abbreviated Title:** | M/J COMP SCI 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make |

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| | observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (63)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

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| HE.6.C.1.3: | Identify environmental factors that affect personal health.<br>Remarks/Examples |
| | Some examples may include air quality, availability of sidewalks, |

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| | contaminated food, and road hazards. |
| **HE.6.C.1.8:** | Explain how body systems are impacted by hereditary factors and infectious agents.<br>Remarks/Examples<br>Some examples may include cystic fibrosis affects respiratory and digestive systems, sickle cell anemia affects the circulatory system, influenza affects the respiratory system. |
| **LACC.6.SL.1.1:** | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.<br>c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.<br>d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing. |
| **LACC.6.SL.1.2:** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| **LACC.6.SL.1.3:** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |
| **LACC.6.SL.2.4:** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.6.SL.2.5:** | Include multimedia components (e.g., graphics, images, music, |

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| | sound) and visual displays in presentations to clarify information. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br><br>a. Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from |

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| | and supports the argument presented. |
| LACC.68.WHST.1.2: | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| LACC.68.WHST.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| LACC.68.WHST.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |
| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of |

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| | each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |
| **LACC.68.WHST.4.10:** | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| **MACC.6.EE.3.9:** | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.* |
| **MACC.6.SP.2.4:** | Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br><br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. |
| **SC.6.E.6.1:** | Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition. |

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| **SC.6.E.6.2:** | Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.<br>Remarks/Examples<br>Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1. |
| **SC.6.E.7.1:** | Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system. |
| **SC.6.E.7.2:** | Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.3:** | Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; MACC.K12.MP.6: Attend to precision; and, MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.4:** | Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere. |
| **SC.6.E.7.5:** | Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.6:** | Differentiate between weather and climate. |
| **SC.6.E.7.7:** | Investigate how natural disasters have affected human life in Florida. |

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| **SC.6.E.7.8:** | Describe ways human beings protect themselves from hazardous weather and sun exposure. |
| **SC.6.E.7.9:** | Describe how the composition and structure of the atmosphere protects life and insulates the planet.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.L.14.1:** | Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.L.14.2:** | Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life. |
| **SC.6.L.14.3:** | Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing. |
| **SC.6.L.14.4:** | Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.L.14.5:** | Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis. |
| **SC.6.L.14.6:** | Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.<br>Remarks/Examples<br>Integrate HE.6.C.1.8. Explain how body systems are impacted by |

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| | hereditary factors and infectious agents. |
| SC.6.L.15.1: | Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains. |
| SC.6.N.1.1: | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| SC.6.N.1.2: | Explain why scientific investigations should be replicable. |
| SC.6.N.1.3: | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.<br>Remarks/Examples<br>Explain that an investigation is observing or studying the natural world, without interference or manipulation, and an experiment is an investigation that involves variables (independent/manipulated and dependent/ outcome) and establishes cause-and-effect relationships (Schwartz, 2007). |
| SC.6.N.1.4: | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| SC.6.N.1.5: | Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.3.7; LACC.68.WHST.1.2; and, LACC.68.WHST.3.9. |
| SC.6.N.2.1: | Distinguish science from other activities involving thought. |

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| | Remarks/Examples<br>Thought refers to any mental or intellectual activity involving an individual's subjective consciousness. Science is a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world. |
| **SC.6.N.2.2:** | Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered. |
| **SC.6.N.2.3:** | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| **SC.6.N.3.1:** | Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life. |
| **SC.6.N.3.2:** | Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws. |
| **SC.6.N.3.3:** | Give several examples of scientific laws. |
| **SC.6.N.3.4:** | Identify the role of models in the context of the sixth grade science benchmarks.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.6.P.11.1:** | Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa. |
| **SC.6.P.12.1:** | Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| **SC.6.P.13.1:** | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |

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| SC.6.P.13.2: | Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are. |
| SC.6.P.13.3: | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |

## RELATED GLOSSARY TERM DEFINITIONS (52)

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| **Atmosphere:** | The layers of gas that surround Earth, other planets, or stars. |
| **Atom:** | The smallest unit of a chemical element that can still retain the properties of that element. |
| **Bacteria:** | Any of a large group of one-celled organisms that lack a cell nucleus, reproduce by fission or by forming spores, and in some cases cause disease. |
| **Biosphere:** | The part of the earth and its atmosphere in which living organisms exist or that is capable of supporting life. |
| **Cell:** | The smallest structural unit of an organism that is capable of independent functioning, consisting of cytoplasm and various organelles, all surrounded by a semipermeable cell membrane, which in some cells, is surrounded by a cell wall |
| **Chloroplast:** | A plastid in most cells of most plants that contains chlorophylls and carotenoid pigments and produces glucose through photosynthesis. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |
| **Cytoplasm:** | The material that surrounds organelles and inside the cell membrane. |
| **Delta:** | A usually triangular mass of sediment, especially silt and sand, deposited at the mouth of a river. Deltas form when a river flows into a body of standing water, such as a sea or lake, and deposits large quantities of sediment. |

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| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Energy:** | The capacity to do work. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Fungus:** | A kingdom of eukaryotic organisms that reproduce by spores and have cell walls that contain chitin, examples include the mushrooms, molds, yeasts, and mildews. |
| **Geosphere:** | The solid part of the earth consisting of the crust and outer mantle. |
| **Glacier:** | A huge mass of ice slowly flowing over a land mass, formed from compacted snow in an area where snow accumulation exceeds melting and sublimation. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Homeostasis:** | The tendency of an organism or cell to regulate its internal conditions, such as the chemical composition of its body fluids, so as to maintain health and functioning, regardless of outside conditions. |
| **Humidity:** | The amount of water vapor in the atmosphere, usually expressed as either absolute humidity or relative humidity. |
| **Hydrosphere:** | All of the Earth's water, including surface water (water in oceans, lakes, and rivers), groundwater (water in soil and beneath the Earth's surface), snowcover, ice, and water in the atmosphere, including water vapor. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Kinetic energy:** | The energy possessed by a body because of its motion. |

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| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Magnetic:** | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| **Mass:** | The amount of matter an object contains. |
| **Membrane:** | A thin layer of tissue that surrounds or lines a cell, a group of cells, or a cavity; any barrier separating two fluids. |
| **Mitochondrion:** | A spherical or elongated organelle in the cytoplasm of nearly all eukaryotic cells that uses enzymes and membranes to make chemical energy available to the cell to make food to usable energy. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Molecule:** | The smallest unit of matter of a substance that retains all the physical and chemical properties of that substance; consists of a single atom or a group of atoms bonded together. |
| **Motion:** | The act or process of changing position and/or direction. |
| **Nucleus:** | The center region of an atom where protons and neutrons are located; also a cell structure that contains the cell genetic material of the cell. |
| **Observation :** | What one has observed using senses or instruments. |
| **Organ:** | A structure containing different tissues that are organized to carry out a specific function of the body (e.g., heart, lungs, brain, etc.) |
| **Organelle:** | A differentiated structure within a cell, such as a mitochondrion, vacuole, or chloroplast, that performs a specific function. |
| **Organism:** | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| **Parasite:** | An organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Potential energy:** | Energy stored in a physical system due to the object's configuration and position. |

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| **Precipitation:** | In meteorology, a form of water, such as rain, snow, or sleet that condenses from the atmosphere, becomes too heavy to remain suspended, and falls to the Earth's surface. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Scientist:** | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tissue:** | Similar cells acting to perform a specific function. |
| **Vacuole:** | A cavity in the cytoplasm of a cell, bound by a single membrane and containing water, food, or metabolic waste. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Virus:** | A noncellular, usually disease-causing, particle with an outer protein code and a core of genetic material that is capable of growth and replication in living host cells. |

# Course: M/J Earth/Space Science, Advanced-2001020

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4319.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Earth/Space Science, Advanced |
| **Course Number:** | 2001020 |
| **Course Abbreviated Title:** | M/J EARTH/SPA SCI ADV |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Science **SubSubject:** Earth/Space Sciences |
| **Course length:** | Year (Y) |
| **Course Level:** | 3 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot |

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| | equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007).<br><br>**Special Notes:**<br>**Instructional Practices**<br>Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:<br><br>1. Ensuring wide reading from complex text that varies in length.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.<br>4. Emphasizing students supporting answers based upon evidence from the text.<br>5. Providing extensive research and writing opportunities (claims and evidence). |

## STANDARDS (89)

**Integrate Common Core Standards for Mathematical Practice (MP) as applicable.**

- MACC.K12.MP.1.1 Make sense of problems and persevere in solving them.
- MACC.K12.MP.2.1 Reason abstractly and quantitatively.
- MACC.K12.MP.3.1 Construct viable arguments and critique the reasoning of others.
- MACC.K12.MP.4.1 Model with mathematics.
- MACC.K12.MP.5.1 Use appropriate tools strategically.
- MACC.K12.MP.6.1 Attend to precision.
- MACC.K12.MP.7.1 Look for and make use of structure.
- MACC.K12.MP.8.1 Look for and express regularity in repeated reasoning.

**Use grade appropriate Nature of Science benchmarks** (i.e. if this course is offered to seventh grade students, then the SC.7.N benchmarks should be integrated into the course content, and SC.6.N and SC.8.N benchmarks should be omitted from the seventh grade course).

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| **HE.6.C.1.3:** | Identify environmental factors that affect personal health.<br>Remarks/Examples<br>Air and water quality, availability of sidewalks, contaminated food, and road hazards. |
| **HE.6.C.1.3:** | Identify environmental factors that affect personal health.<br>Remarks/Examples<br>Some examples may include air quality, availability of sidewalks, contaminated food, and road hazards. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.RST.2.5:** | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic. |
| **LACC.68.RST.2.6:** | Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text. |
| **LACC.68.RST.3.7:** | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| **LACC.68.RST.3.8:** | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| **LACC.68.RST.3.9:** | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| **LACC.68.WHST.1.1:** | Write arguments focused on *discipline-specific content.*<br>a. Introduce claim(s) about a topic or issue, acknowledge and |

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| | distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.<br>c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.<br>d. Establish and maintain a formal style.<br>e. Provide a concluding statement or section that follows from and supports the argument presented. |
| **LACC.68.WHST.1.2:** | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br><br>a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.<br>d. Use precise language and domain-specific vocabulary to inform about or explain the topic.<br>e. Establish and maintain a formal style and objective tone.<br>f. Provide a concluding statement or section that follows from and supports the information or explanation presented. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.2.5:** | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. |

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| LACC.68.WHST.2.6: | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| LACC.68.WHST.3.7: | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| LACC.68.WHST.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| LACC.68.WHST.4.10: | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| MACC.7.SP.2.4: | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. *For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.* |
| MACC.7.SP.3.5: | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| LACC.7.SL.1.1: | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as |

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| | needed.<br>c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and, when warranted, modify their own views. |
| **LACC.7.SL.1.2:** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study. |
| **LACC.7.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |
| **LACC.7.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.7.SL.2.5:** | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| **MACC.6.EE.3.9:** | Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.* |
| **MACC.6.SP.2.4:** | Display numerical data in plots on a number line, including dot plots, histograms, and box plots. |
| **MACC.6.SP.2.5:** | Summarize numerical data sets in relation to their context, such as by:<br>a. Reporting the number of observations.<br>b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.<br>c. Giving quantitative measures of center (median and/or mean) |

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| | and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.<br>d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. |
| **SC.6.E.6.1:** | Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition. |
| **SC.6.E.6.2:** | Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.<br>Remarks/Examples<br>Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1. |
| **SC.6.E.7.1:** | Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system. |
| **SC.6.E.7.2:** | Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| **SC.6.E.7.3:** | Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; MACC.K12.MP.6: Attend to precision; and, MACC.K12.MP.7: Look for and make use of structure. |

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| SC.6.E.7.4: | Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere. |
| SC.6.E.7.5: | Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.6.E.7.6: | Differentiate between weather and climate. |
| SC.6.E.7.7: | Investigate how natural disasters have affected human life in Florida. |
| SC.6.E.7.8: | Describe ways human beings protect themselves from hazardous weather and sun exposure. |
| SC.6.E.7.9: | Describe how the composition and structure of the atmosphere protects life and insulates the planet.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.7.E.6.1: | Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores. |
| SC.7.E.6.2: | Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building).<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.7: Look for and make use of structure. |
| SC.7.E.6.3: | Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating. |
| SC.7.E.6.4: | Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes. |
| SC.7.E.6.5: | Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, |

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| | and mountain building. |
| **SC.7.E.6.6:** | Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. |
| **SC.7.E.6.7:** | Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. |
| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.2:** | Differentiate replication (by others) from repetition (multiple trials). |
| **SC.7.N.1.3:** | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.5:** | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. |
| **SC.7.N.1.6:** | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. |
| **SC.7.N.1.7:** | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |

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| SC.7.N.2.1: | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| SC.7.N.3.1: | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. |
| SC.7.N.3.2: | Identify the benefits and limitations of the use of scientific models.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| SC.8.E.5.1: | Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance. |
| SC.8.E.5.10: | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically; and, MACC.K12.MP.6: Attend to precision. |
| SC.8.E.5.11: | Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs. |
| SC.8.E.5.12: | Summarize the effects of space exploration on the economy and culture of Florida. |
| SC.8.E.5.2: | Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars. |
| SC.8.E.5.3: | Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition. |
| SC.8.E.5.4: | Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions. |
| SC.8.E.5.5: | Describe and classify specific physical properties of stars: apparent |

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| | magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). |
| **SC.8.E.5.6:** | Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics; and MACC.K12.MP.7: Look for and make use of structure. |
| **SC.8.E.5.7:** | Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions. |
| **SC.8.E.5.8:** | Compare various historical models of the Solar System, including geocentric and heliocentric.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.E.5.9:** | Explain the impact of objects in space on each other including:<br>1. the Sun on the Earth including seasons and gravitational attraction<br>2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body. |
| **SC.8.N.1.1:** | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| **SC.8.N.1.2:** | Design and conduct a study using repeated trials and replication. |
| **SC.8.N.1.3:** | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| **SC.8.N.1.4:** | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |

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| **SC.8.N.1.5:** | Analyze the methods used to develop a scientific explanation as seen in different fields of science. |
| **SC.8.N.1.6:** | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.2.1:** | Distinguish between scientific and pseudoscientific ideas.<br>Remarks/Examples<br>Science is testable, pseudo-science is not; science seeks falsifications, pseudo-science seeks confirmations (e.g. astrology is pseudoscience). |
| **SC.8.N.2.2:** | Discuss what characterizes science and its methods.<br>Remarks/Examples<br>Science is the systematic, organized inquiry that is derived from observations and experimentation that can be verified through testing to explain natural phenomena. |
| **SC.8.N.3.1:** | Select models useful in relating the results of their own investigations.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |
| **SC.8.N.3.2:** | Explain why theories may be modified but are rarely discarded. |
| **SC.8.N.4.1:** | Explain that science is one of the processes that can be used to inform decision making at the community, state, national, and international levels. |
| **SC.8.N.4.2:** | Explain how political, social, and economic concerns can affect science, and vice versa. |
| **SC.912.E.5.4:** | Explain the physical properties of the Sun and its dynamic nature and connect them to conditions and events on Earth.<br>Remarks/Examples<br>Describe the physical properties of the Sun (sunspot cycles, solar |

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| | flares, prominences, layers of the Sun, coronal mass ejections, and nuclear reactions) and the impact of the Sun as the main source of external energy for the Earth. |
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| **SC.912.E.6.1:** | Describe and differentiate the layers of Earth and the interactions among them.<br>Remarks/Examples |
| | Recognize the importance of the study of seismic wave data and how it can be used to determine the internal structure, density variations, and dynamic processes between Earth's layers. |
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| **SC.912.E.6.2:** | Connect surface features to surface processes that are responsible for their formation.<br>Remarks/Examples |
| | Identify various landforms (e.g. dunes, lakes, sinkholes, aquifers) and describe how they form (erosion, physical/chemical weathering, and deposition). Explain how sea level changes over time have exposed and inundated continental shelves, created and destroyed inland seas, and shaped the surface of the Earth. |
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| **SC.912.E.6.3:** | Analyze the scientific theory of plate tectonics and identify related major processes and features as a result of moving plates.<br>Remarks/Examples |
| | Discuss the development of plate tectonic theory, which is derived from the combination of two theories: continental drift and seafloor spreading. Compare and contrast the three primary types of plate boundaries (convergent, divergent, and transform). Explain the origin of geologic features and processes that result from plate tectonics (e.g. earthquakes, volcanoes, trenches, mid-ocean ridges, island arcs and chains, hot spots, earthquake distribution, tsunamis, mountain ranges). |
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| **SC.912.E.7.3:** | Differentiate and describe the various interactions among Earth systems, including: atmosphere, hydrosphere, cryosphere, geosphere, and biosphere.<br>Remarks/Examples |
| | Interactions include transfer of energy (biogeochemical cycles, water cycle, ground and surface waters, photosynthesis, radiation, plate tectonics, conduction, and convection), storms, winds, waves, |

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| | erosion, currents, deforestation and wildfires, hurricanes, tsunamis, volcanoes. |
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| SC.912.E.7.5: | Predict future weather conditions based on present observations and conceptual models and recognize limitations and uncertainties of such predictions.<br>Remarks/Examples |
| | Use models, weather maps and other tools to predict weather conditions and differentiate between accuracy of short-range and long-range weather forecasts. |
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| SC.912.E.7.6: | Relate the formation of severe weather to the various physical factors.<br>Remarks/Examples |
| | Identify the causes of severe weather. Compare and contrast physical factors that affect the formation of severe weather events (e.g. hurricanes, tornados, flash floods, thunderstorms, and drought). |
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## RELATED GLOSSARY TERM DEFINITIONS (62)

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| **Atmosphere:** | The layers of gas that surround Earth, other planets, or stars. |
| **Attraction :** | A term used to describe the electric or magnetic force exerted by oppositely charged objects or to describe the gravitational force that pulls objects toward each other. |
| **Biosphere:** | The part of the earth and its atmosphere in which living organisms exist or that is capable of supporting life. |
| **Conduction:** | To transmit heat, sound, or electricity through a medium. |
| **Convection:** | Heat transfer in a gas or liquid by the circulation of currents from one region to another. |

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| **Current :** | The amount of electric charge flowing past a specified circuit point per unit time. |
| **Deforestation:** | The cutting down and removal of all or most of the trees in a forested area. |
| **Delta:** | A usually triangular mass of sediment, especially silt and sand, deposited at the mouth of a river. Deltas form when a river flows into a body of standing water, such as a sea or lake, and deposits large quantities of sediment. |
| **Density:** | Concentration of matter of an object; number of individuals in the same species that live in a given area; the mass per unit volume. |
| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Deposition:** | The process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area. |
| **Desertification:** | The transformation of arable or habitable land to desert, as by a change in climate or destructive land use. |
| **Dune:** | A hill or ridge of sand piled up by the wind. |
| **Earthquake:** | The shaking of the ground caused by a sudden release of energy in Earth's crust. |
| **Eclipse:** | The partial or total blocking of light of one celestial object by another. |
| **Electromagnetic spectrum:** | The entire range of electromagnetic radiation. At one end of the spectrum are gamma rays, which have the shortest wavelengths and high frequencies. At the other end are radio waves, which have the longest wavelengths and low frequencies. Visible light is near the center of the spectrum. |
| **Energy:** | The capacity to do work. |
| **Erosion:** | The wearing away of Earth's surface by the breakdown and transportation of rock and soil. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Force:** | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Frequency:** | The number of cycles or waves per unit time. |

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| **Galaxy:** | A large collection of stars, gases, and dust that are part of the universe (e.g., the Milky Way galaxy) bound together by gravitational forces. |
| **Geocentric:** | Relating to a model of the solar system or universe having the Earth as the center. |
| **Geosphere:** | The solid part of the earth consisting of the crust and outer mantle. |
| **Glacier:** | A huge mass of ice slowly flowing over a land mass, formed from compacted snow in an area where snow accumulation exceeds melting and sublimation. |
| **Gravity:** | The force of attraction between any two objects. |
| **Heat:** | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance |
| **Heliocentric:** | Relating to a model of the solar system or universe having the Sun as the center. |
| **Humidity:** | The amount of water vapor in the atmosphere, usually expressed as either absolute humidity or relative humidity. |
| **Hydrosphere:** | All of the Earth's water, including surface water (water in oceans, lakes, and rivers), groundwater (water in soil and beneath the Earth's surface), snowcover, ice, and water in the atmosphere, including water vapor. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Law :** | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| **Light:** | Electromagnetic radiation that lies within the visible range. |
| **Liquid:** | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Lithosphere:** | The outer part of the solid earth composed of rock essentially like that exposed at the surface, consisting of the crust and outermost |

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| | layer of the mantle, and usually considered to be about 60 miles (100 kilometers) in thickness. |
| **Mass:** | The amount of matter an object contains. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Moon:** | A natural satellite that revolves around a planet. |
| **Nuclear reaction:** | A process, such as fission, fusion, or radioactive decay, in which the structure of an atomic nucleus is altered through release of energy or mass or by being broken apart. |
| **Observation :** | What one has observed using senses or instruments. |
| **Planet:** | A large body in space that orbits a star and does not produce light of its own. |
| **Plate tectonics:** | Theory of global dynamics in which Earth's crust is divided into a smaller number of large, rigid plates whose movements cause seismic activity along their borders. |
| **Precipitation:** | In meteorology, a form of water, such as rain, snow, or sleet that condenses from the atmosphere, becomes too heavy to remain suspended, and falls to the Earth's surface. |
| **Pseudoscientific:** | A theory, methodology, or practice that is considered to be without scientific foundation. |
| **Radiation:** | Emission of energy in the form of rays or waves. |
| **Radioactive dating:** | Measurement of the amount of radioactive material (usually carbon 14) that an object contains; can be used to estimate the age of the object. |
| **Replication:** | In scientific research, conducting an experiment to confirm findings or to ensure accuracy. In molecular biology, the process by which genetic material is copied in cells. |

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| **Season:** | One of four natural divisions of the year—spring, summer, autumn, and winter—in temperate zones. Each season has its own characteristic weather and lasts approximately three months. The change in the seasons is brought about by the shift in the angle at which the Sun's rays strike the Earth. This angle changes as the Earth orbits in its yearly cycle around the Sun due to the tilt of the Earth's axis. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |
| **Solar system:** | A star and all the planets and other bodies that orbit it; the region in space where these bodies move. |
| **Solid:** | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Space:** | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere. |
| **Speed:** | Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place. |
| **Sun:** | The closest star to Earth and the center of our solar system. |
| **Superposition:** | The principle that in a group of stratified sedimentary rocks the lowest were the earliest to be deposited. |
| **Theory :** | A set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena. |
| **Tide:** | The regular rise and fall in the surface level of the Earth's oceans, seas, and bays caused by the gravitational attraction of the Moon and to a lesser extent of the Sun. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |
| **Water cycle:** | The path water takes as it is being cycled through the environment, including condensation, evaporation, and precipitation. |
| **Wavelength:** | The distance between crests of a wave. |

# Course: M/J Research 3- 1700020

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3847.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Research 3 |
| **Course Number:** | 1700020 |
| **Course Abbreviated Title:** | M/J RESEARCH 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | The purpose of this course is to enable students to develop advanced knowledge and skills in the research process with emphasis on data collection and analysis.<br><br>The content should include, but not be limited to, the following:<br><br>• research process<br>• research questions and hypotheses<br>• review of literature and other resources<br>• legal and ethical issues in research<br>• research design<br>• data collection, analysis, and statistics<br>• interpretation of results<br>• application of findings<br>• report formats, styles, and content<br>• investigations<br>• critical analysis of research |

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| | • a major research project, preferably cross-curricular |

## STANDARDS (26)

LACC.8.W.1.1 Write arguments to support claims with clear reasons and relevant evidence.

LACC.8.SL.1.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

LACC.8.L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

LACC.8.L.1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

LACC.68.WHST.1.1 Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.

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| **LACC.68.RH.1.3:** | Identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered). |
| **LACC.68.RH.3.7:** | Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts. |
| **LACC.68.RH.3.8:** | Distinguish among fact, opinion, and reasoned judgment in a text. |
| **LACC.68.RH.3.9:** | Analyze the relationship between a primary and secondary source on the same topic. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.RST.1.3:** | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |

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| LACC.68.RST.3.7: | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). |
| LACC.68.RST.3.8: | Distinguish among facts, reasoned judgment based on research findings, and speculation in a text. |
| LACC.68.RST.3.9: | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. |
| LACC.68.WHST.1.1a: | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. |
| LACC.8.SL.2.4: | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.8.SL.2.5: | Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest. |
| LACC.8.W.1.1e: | Provide a concluding statement or section that follows from and supports the argument presented. |
| LACC.8.W.1.2b: | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. |
| LACC.8.W.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.8.W.3.9: | Draw evidence from literary or informational texts to support analysis, reflection, and research.<br><br>a. Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new").<br>b. Apply grade 8 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant |

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| | evidence is introduced”). |
| **LACC.8.W.4.10:** | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| **MACC.K12.MP.1.1:** | **Make sense of problems and persevere in solving them.**<br><br>Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify correspondences between different approaches. |
| **SS.8.A.1.1:** | Provide supporting details for an answer from text, interview for oral history, check validity of information from research/text, and identify strong vs. weak arguments.<br>Remarks/Examples<br>Students should be encouraged to utilize FINDS (Focus, Investigage, Note, Develop, Score), Florida's research process model accessible at: http://www.fldoe.org/bii/Library_Media/pdf/12TotalFINDS.pdf. |

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| SS.8.A.1.4: | Differentiate fact from opinion, utilize appropriate historical research and fiction/nonfiction support materials. |
| MACC.K12.MP.3.1: | **Construct viable arguments and critique the reasoning of others.**<br><br>Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments. |
| MACC.K12.MP.6.1: | **Attend to precision.**<br><br>Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions. |

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| SC.8.N.1.1: | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| SC.8.N.1.4: | Explain how hypotheses are valuable if they lead to further investigations, even if they turn out not to be supported by the data. |
| SC.8.N.1.6: | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence.<br>Remarks/Examples<br>CCSS Connections: MACC.K12.MP.4: Model with mathematics. |

## RELATED GLOSSARY TERM DEFINITIONS (7)

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| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Hypothesis :** | A tentative explanation for an observation, phenomenon, or scientific problem that can be tested by further investigation. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Model :** | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| **Observation :** | What one has observed using senses or instruments. |
| **Sense:** | Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium. |

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| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |

# Course: M/J Research 2- 1700010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3845.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Research 2 |
| **Course Number:** | 1700010 |
| **Course Abbreviated Title:** | M/J RESEARCH 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | The purpose of this course is to enable students to develop proficient knowledge and skills in the research process with emphasis on appropriate research design.<br><br>The content should include, but not be limited to, the following:<br><br>• research process<br>• experimental, descriptive, and historical research<br>• legal and ethical issues in research-research questions and hypotheses<br>• review of literature and other resources-report formats, styles, and content-investigations<br>• critical analysis of research<br>• a major research project, preferably cross-disciplinary |

## STANDARDS (26)

LACC.7.W.1.2 Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

LACC.7.W.3.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.

LACC.7.SL.1.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

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| **LACC.68.RH.1.1:** | Cite specific textual evidence to support analysis of primary and secondary sources. |
| **LACC.68.RST.1.1:** | Cite specific textual evidence to support analysis of science and technical texts. |
| **LACC.68.RST.1.2:** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| **LACC.68.WHST.1.1a:** | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically. |
| **LACC.68.WHST.1.2b:** | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. |
| **LACC.7.L.1.1:** | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<br><br>a. Explain the function of phrases and clauses in general and their function in specific sentences.<br>b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.<br>c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers. |
| **LACC.7.RI.3.8:** | Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is |

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| | relevant and sufficient to support the claims. |
| LACC.7.RI.3.9: | Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts. |
| LACC.7.RL.1.1: | Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. |
| LACC.7.RL.1.2: | Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text. |
| LACC.7.SL.2.4: | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.7.W.1.1a: | Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically. |
| LACC.7.W.1.1b: | Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text. |
| LACC.7.W.1.1c: | Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence. |
| LACC.7.W.1.1d: | Establish and maintain a formal style. |
| LACC.7.W.1.1e: | Provide a concluding statement or section that follows from and supports the argument presented. |
| LACC.7.W.1.2a: | Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. |
| LACC.7.W.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) |
| LACC.7.W.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should |

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| | demonstrate command of Language standards 1–3 up to and including grade 7.) |
| LACC.7.W.2.6: | Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources. |
| LACC.7.W.3.7: | Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. |
| LACC.7.W.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| LACC.7.W.4.10: | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. |
| MACC.K12.MP.1.1: | **Make sense of problems and persevere in solving them.**<br><br>Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify |

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| | correspondences between different approaches. |
| MACC.K12.MP.3.1: | **Construct viable arguments and critique the reasoning of others.**<br><br>Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments. |
| MACC.K12.MP.6.1: | **Attend to precision.**<br><br>Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions. |

# Course: M/J Research 1- 1700000

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3844.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Research 1 |
| **Course Number:** | 1700000 |
| **Course Abbreviated Title:** | M/J RESEARCH 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | The purpose of this course is to enable students to develop basic knowledge and skills in the research process with emphasis on determining and refining research questions.<br><br>The content should include, but not be limited to, the following:<br>-research process<br>-research topics<br>-research questions and hypotheses<br>-definition, analysis, and evaluation of research questions<br>-review of literature and other resources<br>-formulation of hypotheses<br>-report formats, styles, and content<br>-directed investigations<br>-critical analysis of research<br>-a major research project, preferably cross-disciplinary |

## STANDARDS (28)

LACC.6.W.1.1 Write arguments to support claims with clear reasons and relevant evidence.

LACC.6.W.1.2 Write informative/explanatorytexts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content

### LACC.6.L.1 Conventions of Standard English

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| **LACC.6.L.1.1 :** | Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.<br><br>a. Ensure that pronouns are in the proper case (subjective, objective, possessive).<br>b. Use intensive pronouns (e.g., *myself, ourselves*).<br>c. Recognize and correct inappropriate shifts in pronoun number and person.<br>d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).<br>e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.<br><br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Conventions of Standard English |
| **LACC.6.L.1.2 :** | Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.<br><br>a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.<br>b. Spell correctly.<br><br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Conventions of Standard English |

## LACC.6.RI.3 Integration of Knowledge and Ideas

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| **LACC.6.RI.3.8 :** | Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Integration of Knowledge and Ideas |
| **LACC.6.RI.3.9 :** | Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Integration of Knowledge and Ideas |

## LACC.6.RL.1 Key Ideas and Details

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| **LACC.6.RL.1.1 :** | Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Key Ideas and Details |
| **LACC.6.RL.1.2 :** | Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Key Ideas and Details |

## LACC.6.SL.1 Comprehension and Collaboration

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| **LACC.6.SL.1.1 :** | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.<br>c. Pose and respond to specific questions with elaboration |

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| | and detail by making comments that contribute to the topic, text, or issue under discussion.<br>d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.<br><br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

## LACC.6.SL.2 Presentation of Knowledge and Ideas

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| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## LACC.6.W.1 Text Types and Purposes

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| **LACC.6.W.1.1a :** | Introduce claim(s) and organize the reasons and evidence clearly.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |
| **LACC.6.W.1.1b :** | Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of the topic or text.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |
| **LACC.6.W.1.1d :** | Establish and maintain a formal style.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |
| **LACC.6.W.1.2b :** | Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |
| **LACC.6.W.1.2e :** | Establish and maintain a formal style.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |

## LACC.6.W.3 Research to Build and Present Knowledge

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| **LACC.6.W.3.8 :** | Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |
| **LACC.6.W.3.9 :** | Draw evidence from literary or informational texts to support analysis, reflection, and research.<br><br>a. Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics").<br>b. Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").<br><br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

## LACC.6.W.4 Range of Writing

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| **LACC.6.W.4.10 :** | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Range of Writing |

## LACC.68.RH.1 Key Ideas and Details

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| **LACC.68.RH.1.1 :** | Cite specific textual evidence to support analysis of primary and secondary sources.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date |

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| | Adopted or Revised: 12/10<br>Belongs to: Key Ideas and Details |

## LACC.68.RST.1 Key Ideas and Details

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| **LACC.68.RST.1.1 :** | Cite specific textual evidence to support analysis of science and technical texts.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Key Ideas and Details |
| **LACC.68.RST.1.2 :** | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Key Ideas and Details |

## LACC.68.WHST.1 Text Types and Purposes

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| **LACC.68.WHST.1.1a :** | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |
| **LACC.68.WHST.1.1e :** | Provide a concluding statement or section that follows from and supports the argument presented.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |
| **LACC.68.WHST.1.2b :** | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.<br>Cognitive Complexity: 0 l Date Adopted or Revised: 0<br>Belongs to: Text Types and Purposes |

## MACC.K12.MP.1 Make sense of problems and persevere in solving them.

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| **MACC.K12.MP.1.1 :** | **Make sense of problems and persevere in solving them.**<br><br>Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and |

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| | try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.<br><br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Make sense of problems and persevere in solving them. |

**MACC.K12.MP.3 Construct viable arguments and critique the reasoning of others.**

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| **MACC.K12.MP.3.1 :** | **Construct viable arguments and critique the reasoning of others.**<br><br>Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even |

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| | though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.<br><br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Construct viable arguments and critique the reasoning of others. |

**MACC.K12.MP.6 Attend to precision.**

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| **MACC.K12.MP.6.1 :** | **Attend to precision.**<br><br>Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.<br><br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Attend to precision. |

**SC.6.N.1 The Practice of Science**

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| **SC.6.N.1.1 :** | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 02/08 |

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| | Belongs to: The Practice of Science<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |

**SS.6.W.1 Utilize historical inquiry skills and analytical processes.**

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| **SS.6.W.1.4 :** | Describe the methods of historical inquiry and how history relates to the other social sciences.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Utilize historical inquiry skills and analytical processes.<br>Remarks/Examples<br>Examples are archaeology, geography, political science, economics. |
| **SS.6.W.1.5 :** | Describe the roles of historians and recognize varying historical interpretations (historiography).<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Utilize historical inquiry skills and analytical processes. |

## RELATED GLOSSARY TERM DEFINITIONS (4)

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| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Observation :** | What one has observed using senses or instruments. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |

# Course: M/J AVID 8th & Career Planning-1700135

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4928.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J AVID 8th & Career Planning |
| **Course Number:** | 1700135 |
| **Course Abbreviated Title:** | M/J AVID 8th & Career Planning |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Advancement Via Individual Determination (AVID) is offered as an academic elective course that prepares students for college readiness and success. AVID is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic survival skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.<br><br>The eighth grade AVID Elective course is the year of preparation for high school. The students will regularly exhibit and utilize the skills and strategies learned in the sixth and seventh grade AVID courses. Students will refine previous goals, focusing on their transition to high school as part of a college preparatory path. Their writing will focus on completing all steps of the writing process and varying style, word choice, vocabulary, structure and voice. Major writing assignments include persuasive, expository, descriptive and timed writing. Students will transition from active learners to leaders. Other |

areas of focus include increasing the use of technology and building upon their test preparation and test-taking knowledge. They will broaden their experiences with analyzing text and utilizing appropriate reading strategies in various settings. Students will become more involved in the presentations of guest speakers and field trips, particularly as they relate to preparation and prior knowledge. Students will also participate in college preparatory testing and build connections with the high school they will attend.

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.

Course student performance standards must be adopted by the district, and they must reflect appropriate Common Core State Standards.

## Related AVID Standards

**Domain CD: Character Development**
**Cluster 1 Self-Awareness**
The student will:
AV.8.CD.1.1 - utilize SLANT interactions in all classes
AV.8.CD.1.2 - exhibit positive behaviors to others, serving as a role model for peers
AV.8.CD.1.3 - collaborate with other students who have different learning styles
AV.8.CD.1.4 - identify conflict management skills necessary for various conflict situations
AV.8.CD.1.5 - discuss views and opinions about the transition to high school, as well as how to be successful in high school
AV.8.CD.1.6 - understand the consequences of work ethic, regarding expectations in high school and college
AV.8.CD.1.7 - understand and utilize the WICR strategies in classes other than the AVID Elective, expressing ownership of academic behaviors

**Cluster 2 Goals**
The student will:
AV.8.CD.2.1 - calculate grade point average and set academic and personal goals for success, being sure to monitor goals at the end of each grading period
AV.8.CD.2.2 - revisit academic six-year plan for secondary education

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| | with teachers, parents, and guidance counselors, especially during registration for ninth-grade courses<br>AV.8.CD.2.3 - re-affirm goals for attending a college and/or university by adding descriptions to action plans<br>AV.8.CD.2.4 - create written and visual depictions of long-range, mid-range and short-range goals to achieve personal, academic or social goals<br>AV.8.CD.2.5 - set short-range goals around projects and/or required reading<br>AV.8.CD.2.6 - select an honors course in high school and write an action plan for successfully completing the course<br>AV.8.CD.2.7 - reflect on and analyze successes and challenges in developing time management skills<br><br>**Cluster 3 Community and School Involvement**<br>The student will:<br>AV.8.CD.3.1 - develop leadership skills by participating in activities, such as: mentoring, community events, service learning, club's, athletic teams, and/or groups within the school<br><br>**Cluster 4Ownership of Learning**<br>The student will:<br>AV.8.CD.4.1 - access grades online or from teachers on a regular basis<br>AV.8.CD.4.2 - analyze grade reports to create a study/action plan for continued academic improvement<br>AV.8.CD.4.3 - evaluate and determine when to seek help to clarify assignment and grades<br><br>**Domain COMM: Communication**<br>**Cluster 1 Speaking**<br>The student will:<br>AV.8.COMM.1.1 - understand and use terminology associated with public speaking<br>AV.8.COMM.1.2 - be aware of audience and differentiate word choice, tone and voice when speaking<br>AV.8.COMM.1.3 - develop awareness of nonverbal communication when speaking, including body language and eye contact<br>AV.8.COMM.1.4 - create rubrics to evaluate speeches on content, delivery and soundness of reasoning<br>AV.8.COMM.1.5 - prepare and use visual aids that support the topic of the speech or presentation<br>AV.8.COMM.1.6 - draft, edit, revise and present a speech to inform<br>AV.8.COMM.1.7 - appeal to interest of audience members |

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| | AV.8.COMM.1.8 - utilize speaking skills in communicating with teachers, counselors and administrators, regarding learning, academic performance and goals<br>AV.8.COMM.1.9 - promote scholarly discourse in tutorials, Socratic Seminars, and Philosophical Chairs<br><br>**Cluster 2 Listening**<br>The student will:<br>AV.8.COMM.2.1 - Create rubrics to evaluate speeches on content, delivery, and soundness of reasoning<br>AV.8.COMM.2.2 - Pose questions that elicit elaboration<br><br>**Domain WRI: Writing**<br>**Cluster 1 The Writing Process**<br>The student will:<br>AV.8.WRI.1.1 - use varied strategies to prepare for and plan writing assignments<br>AV.8.WRI.1.2 - budget and plan time to complete all steps of the writing process<br>AV.8.WRI.1.3 - use feedback from readers to revise drafts<br>AV.8.WRI.1.4 - edit students' essays, especially checking for word choice and voice<br>AV.8.WRI.1.5 - utilize rubrics to self-evaluate and peer evaluate work<br><br>**Cluster 2 Writing Skills**<br>The student will:<br>AV.8.WRI.2.1 - incorporate a body paragraph structure, which establishes and maintains a formal style<br>AV.8.WRI.2.2 - provide a conclusion that follows from and reflects on the narrated experiences or events<br>AV.8.WRI.2.3 - apply strategies to build and expand on vocabulary/ word choice, in order to avoid using clichés in writing<br>AV.8.WRI.2.4 - write descriptive sentences with varied structure<br>AV.8.WRI.2.5 - understand and utilize active and passive voice in writing assignments, as appropriate<br>AV.8.WRI.2.6 - correctly integrate quotes, while citing sources appropriately<br><br>**Cluster 3 Writing Applications**<br>The student will:<br>AV.8.WRI.3.1 -develop and strengthen writing through the creation of a persuasive essay<br>AV.8.WRI.3.2 - develop and strengthen writing through the creation |

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| | of an editorial essay<br>AV.8.WRI.3.3 - develop and strengthen writing through the creation of a 'description of a place' essay<br>AV.8.WRI.3.4 - write to a prompt under timed circumstances<br><br>**Cluster 4 Writing to Learn**<br>The student will:<br>AV.8.WRI.4.1 - compose well-written summaries adhering to the five criteria of good summaries<br>AV.8.WRI.4.2 - evaluate summaries using rubrics and checklists<br>AV.8.WRI.4.3 - refine usage of weekly learning logs, which include thoughts, reactions and responses to class content, and focus on applying concepts learned to one's life and future<br>AV.7.WRI.4.4 - write detailed self-reflections on experiences, presentations, speeches and field trips<br><br>**Domain INQ: Inquiry**<br>**Cluster 1 Costa's Levels of Thinking**<br>The student will:<br>AV.8.INQ.1.1 - recognize and create questions based on Costa's Levels of Thinking and/or Bloom's Taxonomy<br>AV.8.INQ.1.2 - focus on the generalization of processes pertaining to how a solution was found<br><br>**Cluster 2 Tutorials**<br>The student will:<br>AV.8.INQ.2.1 - refine the 10 Steps in the Tutorial Process<br>AV.8.INQ.2.2 - understand roles of all participants in academic tutorials with peers as group members and college tutors as facilitators, twice per week<br>AV.8.INQ.2.3 - as a group member, ask questions, guide and facilitate understanding, support use of resources and take Cornell notes<br>AV.8.INQ.2.4 - complete reflections about the learning process of answering and solving tutorial questions<br>AV.8.INQ.2.5 - develop content-specific, higher-level questions, in order to actively participate in academic tutorials based on analysis of academic grades and needs, outside of class<br><br>**Cluster 3 Socratic Seminar and Philosophical Chairs**<br>The student will:<br>AV.8.INQ.3.1 - actively participate in and evaluate the process of Philosophical Chairs and/or Socratic Seminar, focusing on strategies for continuous improvement |

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| | AV.8.INQ.3.2 - reference text, citing location to support claims and questions<br>AV.8.INQ.3.3 - analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation in a Socratic Seminar or Philosophical Chairs discussion<br>AV.8.INQ.3.4 - evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea in a Socratic Seminar or Philosophical Chairs discussion<br><br>**Domain COLL: Collaboration**<br>**Cluster 1 Collaborative Skills**<br>The student will:<br>AV.8.COLL.1.1 - continue to foster trust building skills by working with classmates<br>AV.8.COLL.1.2 - refine inquiry, listening, and oral communication skills through a variety of activities, including tutorials, presentations, Socratic Seminars, and Philosophical Chairs<br>AV.8.COLL.1.3 - enhance understanding of collaboration and develop leadership skills by working in groups during team building and motivational activities or problem solving<br>AV.8.COLL.1.4 - identify roles within a team/study group to complete a task<br><br>**Domain ORG: Organization**<br>**Cluster 1 Organization and Time Management**<br>The student will:<br>AV.8.ORG.1.1 - develop and maintain an organized binder, divided by subjects, which includes a supply pouch and other academically useful materials<br>AV.8.ORG.1.2 - reorganize the binder at the end of each grading period<br>AV.8.ORG.1.3 - utilize an assignment log or calendar, which shows when assignments are due, when assignments are completed and submitted, and the grade each assignment received for each class<br>AV.8.ORG.1.4 - create a weekly action plan based on the student's academic needs<br>AV.8.ORG.1.5 - complete an academic portfolio for middle school, demonstrating personal and academic growth<br>AV.8.ORG.1.6 - complete reflection/ learning log and present on contributions to academic portfolio<br>AV.8.ORG.1.7 -publish final versions of writing for the academic |

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| | portfolio<br><br>**Cluster 2 Note-Taking**<br>The student will:<br>AV.8.ORG.2.1 - review and utilize the components of the CORNELL WAY focused note-taking process<br>AV.8.ORG.2.2 - write Cornell notes for each class, including AVID, on a weekly basis and acquire knowledge pertaining to expectations of usage from each teacher<br>AV.8.ORG.2.3 - take seven to twelve pages of quality Cornell notes per week<br>AV.8.ORG.2.4 - fill in gaps of information in Cornell notes to maximize use as a study tool for exams<br>AV.8.ORG.2.5 - mark, highlight and underline key concepts in notes to show key information<br>AV.8.ORG.2.6 - write effective summaries for Cornell notes that link all of the learning together<br><br>**Cluster 3 Research and Technology**<br>The student will:<br>AV.8.ORG.3.1 - use technology in assignments and presentations, particularly in response to guest speaker presentation, field trip experiences, and writing assignments<br>AV.8.ORG.3.2 - use the Internet to conduct research in preparation for speeches and essays<br>AV.8.ORG.3.3 - determine validity and applicability of information gathered on the Internet<br><br>**Cluster 4 Test Preparation and Test-Taking**<br>The student will:<br>AV.8.ORG.4.1 - identify and reflect on personal challenges in preparing for, or taking, tests, specifically in advanced and honors courses<br>AV.8.ORG.4.2 - utilize strategies to prepare for different types of exams<br>AV.8.ORG.4.3 - utilize relevant notes/resources to anticipate test questions and study for upcoming assessments<br>AV.8.ORG.4.4 - understand teacher's grading rubric and seek further explanation of test expectations when necessary<br>AV.8.ORG.4.5 - use test taking strategies, such as reading the directions, completing easier problems first, returning to more challenging problems, and checking all answers |

**Domain REA: Reading**
**Cluster 1 Vocabulary**
The student will:
AV.8.REA.1.1 - understand how to use context clues in interpreting new vocabulary

**Cluster 2 Textual Analysis**
The student will:
AV.8.REA.2.1 - compare and contrast the structure of two or more texts and analyze how the structure of each text contributes to its meaning and style
AV.8.REA.2.2 - read and discuss various examples of text, including, but not limited to, articles from fiction and non-fiction
AV.8.REA.2.3 - understand use of persuasive techniques in advertisements and writing
AV.8.REA.2.4 - use multiple reading strategies, including, but not limited to, Marking the Text, and annotating text
AV.8.REA.2.5 - understand and use pre-reading strategies to build background knowledge of unfamiliar texts
AV.8.REA.2.6 - utilize strategies to identify an author's purpose and read for a specific purpose
AV.8.REA.2.7 - practice rereading to deepen understanding of a text
AV.8.REA.2.8 - identify and discuss traits of voice found in literature
AV.8.REA.2.9 - build understanding of drawing inferences from texts
AV.8.REA.2.10 - determine the main idea of grade-appropriate text

**Domain CR: College Readiness**
**Cluster 1 Guest Speakers**
The student will:
AV.8.CR.1.1 - prepare for guest speaker presentations by creating questions for the speakers prior to their visits
AV.8.CR.1.2 - use listening skills during presentations by guest speakers which focus on careers in education, careers in business, community involvement, public speaking and preparation for high school
AV.8.CR.1.3 - draft, peer edit, revise and create a final draft of a letter and/or project of appreciation to guest speakers

**Cluster 2 Field Trips**
The student will:
AV.8.CR.2.1 - participate in field trips, including, but not limited to, the following: one or two college/university visits that are different from previous year, feeder high school visits for a shadow day of an

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| | AVID student, and feeder elementary visits to discuss AVID<br>AV.8.CR.2.2 - use skills of listening and observing during field trip experiences<br>AV.8.CR.2.3 - draft, edit, revise and create final draft of writing that reflects on learning from field trip experience(s)<br><br>**Cluster 3 College and Career Knowledge**<br>The student will:<br>AV.8.CR.3.1 - use technology, guest speakers and field trips to expose students to different aspects of college<br>AV.8.CR.3.2 - use the Internet to analyze a career-related website<br>AV.8.CR.3.3 - utilize email, when appropriate, to interview a person regarding a specific career<br>AV.8.CR.3.4 - understand differences between jobs and careers<br>AV.8.CR.3.5 - complete a career interest inventory to determine potential career opportunities that align with interests<br><br>**Cluster 4 College Entrance Testing**<br>The student will:<br>AV.8.CR.4.1 - take practice exams of EXPLORE, Readistep, PSAT and/or PLAN<br>AV.8.CR.4.2 - participate in an official administration of EXPLORE, Readistep, PSAT and/or PLAN<br>AV.8.CR.4.3 - develop a personal action plan based upon analysis of practice and official test results<br>AV.8.CR.4.4 - utilize AP indicators to plan coursework for high school |
| **General Notes:** | **Special Note:** Skills acquired in this course will be implemented by the student across the curriculum. M/J Advancement Via Individual Determination 8 (M/J AVID 8) is a rigorous course offered by AVID Center, and content must be provided as specified by AVID Center. Teachers must receive training from AVID Center to teach this course.<br><br>Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to |

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| | http://www.fldoe.org/workforce/ced/.<br><br>Listed below are the competencies that must be met to satisfy the requirements of Section 1003.4156, Florida Statutes:<br><br>1.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br><br>2.0 Develop skills to locate, evaluate, and interpret career information.<br><br>3.0 Identify and demonstrate processes for making short and long term goals.<br><br>4.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills.<br><br>5.0 Understand the relationship between educational achievement and career choices/postsecondary options.<br><br>6.0 Identify a career cluster and related pathways that match career and education goals.<br><br>7.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.<br><br>8.0 Demonstrate knowledge of technology and its application in career fields/clusters. |
| **Verion Requirements:** | These requirements include, but are not limited to, the Common Core State Standards that are most relevant to this course. Standards correlated with a specific course requirement may also be addressed by other course requirements as appropriate. Some requirements in this course are not addressed in the Common Core State Standards. Other subject areas and content may be used to fulfill course requirements. This course includes an agreement related to minimum standards for behavior, attendance, and participation. |

# Course: M/J AVID 8th - 1700130

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4926.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J AVID 8th |
| **Course Number:** | 1700130 |
| **Course Abbreviated Title:** | M/J AVID 8th |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Advancement Via Individual Determination (AVID) is offered as an academic elective course that prepares students for college readiness and success. AVID is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic survival skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.<br><br>The eighth grade AVID Elective course is the year of preparation for high school. The students will regularly exhibit and utilize the skills and strategies learned in the sixth and seventh grade AVID courses. Students will refine previous goals, focusing on their transition to high school as part of a college preparatory path. Their writing will focus on completing all steps of the writing process and varying style, word choice, vocabulary, structure and voice. Major writing assignments include persuasive, expository, descriptive and timed writing. Students will transition from active learners to leaders. Other areas of focus include increasing the use of technology and building upon their test preparation and test-taking knowledge. They will |

broaden their experiences with analyzing text and utilizing appropriate reading strategies in various settings. Students will become more involved in the presentations of guest speakers and field trips, particularly as they relate to preparation and prior knowledge. Students will also participate in college preparatory testing and build connections with the high school they will attend.

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.

Course student performance standards must be adopted by the district, and they must reflect appropriate Common Core State Standards.

## Related AVID Standards

**Domain CD: Character Development**
**Cluster 1 Self-Awareness**
The student will:
AV.8.CD.1.1 - utilize SLANT interactions in all classes
AV.8.CD.1.2 - exhibit positive behaviors to others, serving as a role model for peers
AV.8.CD.1.3 - collaborate with other students who have different learning styles
AV.8.CD.1.4 - identify conflict management skills necessary for various conflict situations
AV.8.CD.1.5 - discuss views and opinions about the transition to high school, as well as how to be successful in high school
AV.8.CD.1.6 - understand the consequences of work ethic, regarding expectations in high school and college
AV.8.CD.1.7 - understand and utilize the WICR strategies in classes other than the AVID Elective, expressing ownership of academic behaviors

**Cluster 2 Goals**
The student will:
AV.8.CD.2.1 - calculate grade point average and set academic and personal goals for success, being sure to monitor goals at the end of each grading period
AV.8.CD.2.2 - revisit academic six-year plan for secondary education with teachers, parents, and guidance counselors, especially during registration for ninth-grade courses

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| | AV.8.CD.2.3 - re-affirm goals for attending a college and/or university by adding descriptions to action plans<br>AV.8.CD.2.4 - create written and visual depictions of long-range, mid-range and short-range goals to achieve personal, academic or social goals<br>AV.8.CD.2.5 - set short-range goals around projects and/or required reading<br>AV.8.CD.2.6 - select an honors course in high school and write an action plan for successfully completing the course<br>AV.8.CD.2.7 - reflect on and analyze successes and challenges in developing time management skills<br><br>**Cluster 3 Community and School Involvement**<br>The student will:<br>AV.8.CD.3.1 - develop leadership skills by participating in activities, such as: mentoring, community events, service learning, club's, athletic teams, and/or groups within the school<br><br>**Cluster 4 Ownership of Learning**<br>The student will:<br>AV.8.CD.4.1 - access grades online or from teachers on a regular basis<br>AV.8.CD.4.2 - analyze grade reports to create a study/action plan for continued academic improvement<br>AV.8.CD.4.3 - evaluate and determine when to seek help to clarify assignment and grades<br><br>**Domain COMM: Communication**<br>**Cluster 1 Speaking**<br>The student will:<br>AV.8.COMM.1.1 - understand and use terminology associated with public speaking<br>AV.8.COMM.1.2 - be aware of audience and differentiate word choice, tone and voice when speaking<br>AV.8.COMM.1.3 - develop awareness of nonverbal communication when speaking, including body language and eye contact<br>AV.8.COMM.1.4 - create rubrics to evaluate speeches on content, delivery and soundness of reasoning<br>AV.8.COMM.1.5 - prepare and use visual aids that support the topic of the speech or presentation<br>AV.8.COMM.1.6 - draft, edit, revise and present a speech to inform<br>AV.8.COMM.1.7 - appeal to interest of audience members<br>AV.8.COMM.1.8 - utilize speaking skills in communicating with teachers, counselors and administrators, regarding learning, |

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| | academic performance and goals<br>AV.8.COMM.1.9 - promote scholarly discourse in tutorials, Socratic Seminars, and Philosophical Chairs<br><br>**Cluster 2 Listening**<br>The student will:<br>AV.8.COMM.2.1 - Create rubrics to evaluate speeches on content, delivery, and soundness of reasoning<br>AV.8.COMM.2.2 - Pose questions that elicit elaboration<br><br>**Domain WRI: Writing**<br>**Cluster 1 The Writing Process**<br>The student will:<br>AV.8.WRI.1.1 - use varied strategies to prepare for and plan writing assignments<br>AV.8.WRI.1.2 - budget and plan time to complete all steps of the writing process<br>AV.8.WRI.1.3 - use feedback from readers to revise drafts<br>AV.8.WRI.1.4 - edit students' essays, especially checking for word choice and voice<br>AV.8.WRI.1.5 - utilize rubrics to self-evaluate and peer evaluate work<br><br>**Cluster 2 Writing Skills**<br>The student will:<br>AV.8.WRI.2.1 - incorporate a body paragraph structure, which establishes and maintains a formal style<br>AV.8.WRI.2.2 - provide a conclusion that follows from and reflects on the narrated experiences or events<br>AV.8.WRI.2.3 - apply strategies to build and expand on vocabulary/ word choice, in order to avoid using clichés in writing<br>AV.8.WRI.2.4 - write descriptive sentences with varied structure<br>AV.8.WRI.2.5 - understand and utilize active and passive voice in writing assignments, as appropriate<br>AV.8.WRI.2.6 - correctly integrate quotes, while citing sources appropriately<br><br>**Cluster 3 Writing Applications**<br>The student will:<br>AV.8.WRI.3.1 - develop and strengthen writing through the creation of a persuasive essay<br>AV.8.WRI.3.2 - develop and strengthen writing through the creation of an editorial essay<br>AV.8.WRI.3.3 - develop and strengthen writing through the creation |

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| | of a 'description of a place' essay<br>AV.8.WRI.3.4 - write to a prompt under timed circumstances<br><br>**Cluster 4 Writing to Learn**<br>The student will:<br>AV.8.WRI.4.1 - compose well-written summaries adhering to the five criteria of good summaries<br>AV.8.WRI.4.2 - evaluate summaries using rubrics and checklists<br>AV.8.WRI.4.3 - refine usage of weekly learning logs, which include thoughts, reactions and responses to class content, and focus on applying concepts learned to one's life and future<br>AV.7.WRI.4.4 - write detailed self-reflections on experiences, presentations, speeches and field trips<br><br>**Domain INQ: Inquiry**<br>**Cluster 1 Costa's Levels of Thinking**<br>The student will:<br>AV.8.INQ.1.1 - recognize and create questions based on Costa's Levels of Thinking and/or Bloom's Taxonomy<br>AV.8.INQ.1.2 - focus on the generalization of processes pertaining to how a solution was found<br><br>**Cluster 2 Tutorials**<br>The student will:<br>AV.8.INQ.2.1 - refine the 10 Steps in the Tutorial Process<br>AV.8.INQ.2.2 - understand roles of all participants in academic tutorials with peers as group members and college tutors as facilitators, twice per week<br>AV.8.INQ.2.3 - as a group member, ask questions, guide and facilitate understanding, support use of resources and take Cornell notes<br>AV.8.INQ.2.4 - complete reflections about the learning process of answering and solving tutorial questions<br>AV.8.INQ.2.5 - develop content-specific, higher-level questions, in order to actively participate in academic tutorials based on analysis of academic grades and needs, outside of class<br><br>**Cluster 3 Socratic Seminar and Philosophical Chairs**<br>The student will:<br>AV.8.INQ.3.1 - actively participate in and evaluate the process of Philosophical Chairs and/or Socratic Seminar, focusing on strategies for continuous improvement<br>AV.8.INQ.3.2 - reference text, citing location to support claims and questions |

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| | AV.8.INQ.3.3 - analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation in a Socratic Seminar or Philosophical Chairs discussion<br>AV.8.INQ.3.4 - evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea in a Socratic Seminar or Philosophical Chairs discussion<br><br>**Domain COLL: Collaboration**<br>**Cluster 1 Collaborative Skills**<br>The student will:<br>AV.8.COLL.1.1 - continue to foster trust building skills by working with classmates<br>AV.8.COLL.1.2 - refine inquiry, listening, and oral communication skills through a variety of activities, including tutorials, presentations, Socratic Seminars, and Philosophical Chairs<br>AV.8.COLL.1.3 - enhance understanding of collaboration and develop leadership skills by working in groups during team building and motivational activities or problem solving<br>AV.8.COLL.1.4 - identify roles within a team/study group to complete a task<br><br>**Domain ORG: Organization**<br>**Cluster 1 Organization and Time Management**<br>The student will:<br>AV.8.ORG.1.1 - develop and maintain an organized binder, divided by subjects, which includes a supply pouch and other academically useful materials<br>AV.8.ORG.1.2 - reorganize the binder at the end of each grading period<br>AV.8.ORG.1.3 - utilize an assignment log or calendar, which shows when assignments are due, when assignments are completed and submitted, and the grade each assignment received for each class<br>AV.8.ORG.1.4 - create a weekly action plan based on the student's academic needs<br>AV.8.ORG.1.5 - complete an academic portfolio for middle school, demonstrating personal and academic growth<br>AV.8.ORG.1.6 - complete reflection/ learning log and present on contributions to academic portfolio<br>AV.8.ORG.1.7 - publish final versions of writing for the academic portfolio |

**Cluster 2 Note-Taking**
The student will:
AV.8.ORG.2.1 - review and utilize the components of the CORNELL WAY focused note-taking process
AV.8.ORG.2.2 - write Cornell notes for each class, including AVID, on a weekly basis and acquire knowledge pertaining to expectations of usage from each teacher
AV.8.ORG.2.3 - take seven to twelve pages of quality Cornell notes per week
AV.8.ORG.2.4 - fill in gaps of information in Cornell notes to maximize use as a study tool for exams
AV.8.ORG.2.5 - mark, highlight and underline key concepts in notes to show key information
AV.8.ORG.2.6 - write effective summaries for Cornell notes that link all of the learning together

**Cluster 3 Research and Technology**
The student will:
AV.8.ORG.3.1 - use technology in assignments and presentations, particularly in response to guest speaker presentation, field trip experiences, and writing assignments
AV.8.ORG.3.2 - use the Internet to conduct research in preparation for speeches and essays
AV.8.ORG.3.3 - determine validity and applicability of information gathered on the Internet

**Cluster 4 Test Preparation and Test-Taking**
The student will:
AV.8.ORG.4.1 - identify and reflect on personal challenges in preparing for, or taking, tests, specifically in advanced and honors courses
AV.8.ORG.4.2 - utilize strategies to prepare for different types of exams
AV.8.ORG.4.3 - utilize relevant notes/resources to anticipate test questions and study for upcoming assessments
AV.8.ORG.4.4 - understand teacher's grading rubric and seek further explanation of test expectations when necessary
AV.8.ORG.4.5 - use test taking strategies, such as reading the directions, completing easier problems first, returning to more challenging problems, and checking all answers

**Domain REA: Reading**
**Cluster 1 Vocabulary**

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| | The student will:<br>AV.8.REA.1.1 - understand how to use context clues in interpreting new vocabulary<br><br>**Cluster 2 Textual Analysis**<br>The student will:<br>AV.8.REA.2.1 - compare and contrast the structure of two or more texts and analyze how the structure of each text contributes to its meaning and style<br>AV.8.REA.2.2 - read and discuss various examples of text, including, but not limited to, articles from fiction and non-fiction<br>AV.8.REA.2.3 - understand use of persuasive techniques in advertisements and writing<br>AV.8.REA.2.4 - use multiple reading strategies, including, but not limited to, Marking the Text, and annotating text<br>AV.8.REA.2.5 - understand and use pre-reading strategies to build background knowledge of unfamiliar texts<br>AV.8.REA.2.6 - utilize strategies to identify an author's purpose and read for a specific purpose<br>AV.8.REA.2.7 - practice rereading to deepen understanding of a text<br>AV.8.REA.2.8 - identify and discuss traits of voice found in literature<br>AV.8.REA.2.9 - build understanding of drawing inferences from texts<br>AV.8.REA.2.10 - determine the main idea of grade-appropriate text<br><br>**Domain CR: College Readiness**<br>**Cluster 1 Guest Speakers**<br>The student will:<br>AV.8.CR.1.1 - prepare for guest speaker presentations by creating questions for the speakers prior to their visits<br>AV.8.CR.1.2 - use listening skills during presentations by guest speakers which focus on careers in education, careers in business, community involvement, public speaking and preparation for high school<br>AV.8.CR.1.3 - draft, peer edit, revise and create a final draft of a letter and/or project of appreciation to guest speakers<br><br>**Cluster 2 Field Trips**<br>The student will:<br>AV.8.CR.2.1 - participate in field trips, including, but not limited to, the following: one or two college/university visits that are different from previous year, feeder high school visits for a shadow day of an AVID student, and feeder elementary visits to discuss AVID<br>AV.8.CR.2.2 - use skills of listening and observing during field trip |

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| | experiences<br>AV.8.CR.2.3 - draft, edit, revise and create final draft of writing that reflects on learning from field trip experience(s)<br><br>**Cluster 3 College and Career Knowledge**<br>The student will:<br>AV.8.CR.3.1 - use technology, guest speakers and field trips to expose students to different aspects of college<br>AV.8.CR.3.2 - use the Internet to analyze a career-related website<br>AV.8.CR.3.3 - utilize email, when appropriate, to interview a person regarding a specific career<br>AV.8.CR.3.4 - understand differences between jobs and careers<br>AV.8.CR.3.5 - complete a career interest inventory to determine potential career opportunities that align with interests<br><br>**Cluster 4 College Entrance Testing**<br>The student will:<br>AV.8.CR.4.1 - take practice exams of EXPLORE, Readistep, PSAT and/or PLAN<br>AV.8.CR.4.2 - participate in an official administration of EXPLORE, Readistep, PSAT and/or PLAN<br>AV.8.CR.4.3 - develop a personal action plan based upon analysis of practice and official test results<br>AV.8.CR.4.4 - utilize AP indicators to plan coursework for high school |
| **General Notes:** | **Special Note:** Skills acquired in this course will be implemented by the student across the curriculum. M/J Advancement Via Individual Determination 8 (M/J AVID 8) is a rigorous course offered by AVID Center, and content must be provided as specified by AVID Center. Teachers must receive training from AVID Center to teach this course. |
| **Verion Requirements:** | These requirements include, but are not limited to, the Common Core State Standards that are most relevant to this course. Standards correlated with a specific course requirement may also be addressed by other course requirements as appropriate. Some requirements in this course are not addressed in the Common Core State Standards. Other subject areas and content may be used to fulfill course requirements. This course includes an agreement related to minimum standards for behavior, attendance, and participation. |

# Course: M/J AVID 7th & Career Planning - 1700125

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4925.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J AVID 7th & Career Planning |
| **Course Number:** | 1700125 |
| **Course Abbreviated Title:** | M/J AVID 7th & Career Planning |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Advancement Via Individual Determination (AVID) is offered as an academic elective course that prepares students for college readiness and success. AVID is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic survival skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.<br><br>The seventh grade AVID Elective course builds upon the components of the AVID philosophy. Students will refine short- and long-term goals, and as a result, begin to understand the value in taking charge of their actions. Students will start working on intrapersonal and interpersonal skills, as well as formal and informal speech. Students will complete self-evaluations and peer evaluations, related to reading, writing, organization, and speaking. In broadening their writing practice, students will begin considering audience, purpose and form in their writing. Students will take an active role in their |

learning, understanding the roles of all members in assignments and collaborative lessons. They will expand their knowledge bases of note-taking, in relation to studying and test preparation. Students will be exposed to different field trips, guest speakers and research, to increase their knowledge of college and career options.

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.

Course student performance standards must be adopted by the district, and they must reflect appropriate Common Core State Standards.

## Related AVID Standards

**Domain CD: Character Development**
**Cluster 1 Self-Awareness**
The student will:
AV.7.CD.1.1 - utilize SLANT interactions in all classes
AV.7.CD.1.2 - utilize proper interpersonal skills, such as proper introductions and handshakes
AV.7.CD.1.3 - complete and analyze self-evaluations about learning styles, emotions and personal behaviors
AV.7.CD.1.4 - differentiate between the three basic learning styles (auditory, visual, kinesthetic)
AV.7.CD.1.5 - monitor personal decision-making as a representative of AVID
AV.7.CD.1.6 - recognize and share personal accomplishments

**Cluster 2 Goals**
The student will:
AV.7.CD.2.1 - calculate grade point average and set academic goals for success, being sure to monitor goals at the end of each grading period
AV.7.CD.2.2 - review and refine academic six-year plan for secondary education with teachers, guidance counselors, especially during registration for eighth-grade courses
AV.7.CD.2.3 - create an action plan to identify goals for attending a college or university
AV.7.CD.2.4 - understand the difference between goals and wishes
AV.7.CD.2.5 - differentiate between and write long-range, mid-range and short-range goals

AV.7.CD.2.6 - monitor guidelines of AVID school contract, in order to fulfill requirements
AV.7.CD.2.7 - identify and confront barriers in goal setting and accomplishing goals

**Cluster 3 Community and School Involvement**
The student will:
AV.7.CD.3.1 - participate in a variety of school activities/clubs and community service opportunities throughout the year

**Cluster 4 Ownership of Learning**
The student will:
AV.7.CD.4.1 - access grades online or from teachers on a regular basis
AV.7.CD.4.2 - analyze grade reports to create a study/action plan for continued academic improvement

**Domain COMM: Communication**
**Cluster 1 Speaking**
The student will:
AV.7.COMM.1.1 - understand intermediate terminology associated with public speaking
AV.7.COMM.1.2 - practice varying word choice and tone when speaking
AV.7.COMM.1.3 - utilize proper adult salutations (Dr., Mrs., Ms., etc.)
AV.7.COMM.1.4 - develop awareness of nonverbal communication when speaking, including body language and eye contact
AV.7.COMM.1.5 - understand the difference between a formal and informal speech
AV.7.COMM.1.6 - present a personal speech to build confidence in public speaking
AV.7.COMM.1.7 - draft, edit, revise and present written speeches on various topics
AV.7.COMM.1.8 - practice speaking skills in front of small groups

**Cluster 2 Listening**
The student will:
AV.7.COMM.2.1 - create rubrics to evaluate speeches
AV.7.COMM.2.2 - pose questions to the presenter
AV.7.COMM.2.3 - understand the difference between hearing and listening, and practice how to be a "critical listener" by taking Cornell notes and reflecting with class

**Domain WRI: Writing**

**Cluster 1 The Writing Process**
The student will:
AV.7.WRI.1.1 - use graphic organizers and quick-writes to prepare for writing assignments
AV.7.WRI.1.2 - analyze prompts, in order to effectively respond to writing assignments
AV.7.WRI.1.3 - begin considering the audience, purpose and form for writing assignments
AV.7.WRI.1.4 - in collaborative groups, revise drafts or writing to improve and clarify
AV.7.WRI.1.5 - edit student's essays, especially checking for errors in capitalization and pronoun usage
AV.7.WRI.1.6 - use common editing marks during the editing process
AV.7.WRI.1.7 - utilize rubrics to self-evaluate and peer evaluate work
AV.7.WRI.1.8 - reflect on one's own writing to encourage continual growth

**Cluster 2 Writing Skills**
The student will:
AV.7.WRI.2.1 - develop a clear thesis for expository writing
AV.7.WRI.2.2 - engage and orient the reader by establishing a context and point of view through the development of a strong introduction
AV.7.WRI.2.3 - apply strategies to build and expand on vocabulary/word choice
AV.7.WRI.2.4 - apply strategies to develop ideas and use specific details
AV.7.WRI.2.5 - effectively use pronouns in writing
AV.7.WRI.2.6 - use proper capitalization in writing

**Cluster 3 Writing Applications**
The student will:
AV.7.WRI.3.1 - develop and strengthen writing through the creation of an informational essay
AV.7.WRI.3.2 - develop and strengthen writing through the creation of an memoir essay
AV.7.WRI.3.3 - use writing activities from content area classes to practice, develop and refine writing skills

**Cluster 4 Writing to Learn**
The student will:
AV.7.WRI.4.1 - compose well-written summaries using the writer's own words not copying the original text
AV.7.WRI.4.2 - differentiate between a summary and a reflection

AV.7.WRI.4.3 - use a variety of models to complete weekly learning logs that include thoughts, reactions and responses to class content
AV.7.WRI.4.4 - write self-reflections on presentations, speeches and field trips

**Domain INQ: Inquiry**
**Cluster 1 Costa's Levels of Thinking**
The student will:
AV.7.INQ.1.1 - deepen understanding of Costa's Levels of Thinking and/or Bloom's Taxonomy by recognizing differences between the levels

**Cluster 2 Tutorials**
The student will:
AV.7.INQ.2.1 - understand and utilize 10 Steps in the Tutorial Process
AV.7.INQ.2.2 - understand roles of all participants in academic tutorials with peers as group members and college tutors as facilitators, twice per week
AV.7.INQ.2.3 - complete the Tutorial Request Form (TRF), including heading, source, academic vocabulary, point of confusion and level 2 question(s), prior to class
AV.7.INQ.2.4 - assume appropriate roles(student presenter or group member) during the tutorial process. The student presenter will explain new understanding of their question, and the group members will ask clarifying questions.
AV.7.INQ.2.5 - develop thought provoking questions, in order to actively participate in academic tutorials

**Cluster 3 Socratic Seminar and Philosophical Chairs**
The student will:
AV.7.INQ.3.1 - actively participate in and evaluate the process of Philosophical Chairs and/or Socratic Seminar, selecting topics/articles as appropriate
AV.7.INQ.3.2 - analyze how two or more authors, writing about the same topic, shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts in a Socratic Seminar or Philosophical Chairs discussion
AV.7.INQ.3.3 - compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words) in a Socratic Seminar or Philosophical Chairs discussion

**Domain COLL: Collaboration**
**Cluster 1 Collaborative Skills**
The student will:
AV.7.COLL.1.1 - foster trust building skills by working with partners to complete a specified task
AV.7.COLL.1.2 - enhance understanding of collaboration by working in groups during team building and motivational activities of problem solving
AV.7.COLL.1.3 - participates in group discussions and reflections based on collaborative work (e.g., Think-Pair-Share, Jigsaw, Numbered Heads)
AV.7.COLL.1.4 - acknowledges new information expressed by others and, when warranted, modify views accordingly
AV.7.COLL.1.5 - engage in dialogue with a large, teacher-supported group discussion, to gain a deeper understanding of the topic discussed and the process used
AV.7.COLL.1.6 - refine inquiry, listening, and oral communication skills through a variety of activities, including tutorials, presentations, Socratic Seminars, and Philosophical Chairs

**Domain ORG: Organization**
**Cluster 1 Organization and Time Management**
The student will:
AV.7.ORG.1.1 - develop and maintain an organized binder, divided by subjects, which includes a supply pouch and other academically useful materials
AV.7.ORG.1.2 - reorganize the binder at the end of each grading period
AV.7.ORG.1.3 - utilize an assignment log or calendar, which shows when assignments are due, when assignments are completed and submitted, and the grade each assignment received for each class
AV.7.ORG.1.4 - evaluate personal time management habits and monitor effectiveness accordingly
AV.7.ORG.1.5 - continue compiling an academic portfolio demonstrating personal and academic growth
AV.7.ORG.1.6 - complete reflection/ learning log and present on contributions to academic portfolio
AV.7.ORG.1.7 - publish final versions of writing for the academic portfolio

**Cluster 2 Note-Taking**
The student will:
AV.7.ORG.2.1 - develop a basic understanding pertaining to the

components of the CORNELL WAY focused note-taking process
AV.7.ORG.2.2 - take notes for each core class on a weekly basis
AV.7.ORG.2.3 - take seven to twelve pages of quality Cornell notes per week
AV.7.ORG.2.4 - understand how to utilize Cornell notes as a study tool
AV.7.ORG.2.5 - have notes available during tutorials to support questioning
AV.7.ORG.2.6 - understand how to identify important points, use abbreviations, and use shorthand in the right column of Cornell notes
AV.7.ORG.2.7 - begin writing questions (any level) in the left column that correspond to chunks of information in the notes section
AV.7.ORG.2.8 - compose an essential question based on the standard or objective covered by the lesson
AV.7.ORG.2.9 - reflect on all notes taken during a unit of study after the test is returned and consider gaps of study that led to missed questions

**Cluster 3 Research and Technology**
The student will:
AV.7.ORG.3.1 - use technology in assignments and presentations, particularly in response to guest speaker presentation, field trip experiences, and final drafts of writing assignments
AV.7.ORG.3.2 - demonstrate command of keyboarding skills to type a minimum of three pages

**Cluster 4 Test Preparation and Test-Taking**
The student will:
AV.7.ORG.4.1 - identify and reflect on particular problems in preparing for, or taking, tests
AV.7.ORG.4.2 - identify and distinguish strategies to study for different types of exams (such as matching, true-false, multiple-choice, vocabulary, and essay tests)

**Domain REA: Reading**
**Cluster 1 Vocabulary**
The student will:
AV.7.REA.1.1 - identify key vocabulary while reading

**Cluster 2 Textual Analysis**
The student will:
AV.7.REA.2.1 - read and discuss various examples of text, including, but not limited to, articles from magazines and newspapers

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| | AV.7.REA.2.2 - analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning<br>AV.7.REA.2.3 - determine the main idea of grade-appropriate text<br>AV.7.REA.2.4 - use multiple reading strategies, including, but not limited to, Marking the Text, annotating text and numbering paragraphs to better understand text while reading<br>AV.7.REA.2.5 - circle and underline relevant information<br>AV.7.REA.2.6 - summarize informational text<br>AV.7.REA.2.7 - connect visuals (captions, illustrations, etc.) to the surrounding text.<br><br>**Domain CR: College Readiness**<br>**Cluster 1 Guest Speakers**<br>The student will:<br>AV.7.CR.1.1 - choose guest speakers who represent careers of interest and prepare questions for the speakers prior to their visit when appropriate<br>AV.7.CR.1.2 - use listening skills during presentations by guest speakers from the school, community and college, which focus on the value of postsecondary education and choosing a college<br>AV.7.CR.1.3 - draft, peer edit, revise and create a final draft of a thank-you letter to guest speakers<br><br>**Cluster 2 Field Trips**<br>The student will:<br>AV.7.CR.2.1 - participate in field trips, such as college/university visits that are different from the previous year, feeder high school trips for a shadow day to visit an AP/IB/AICE/DE class, and feeder elementary visits for service learning and/or a trip that focuses on careers<br>AV.7.CR.2.2 - use skills of listening and observing during field trip experiences<br><br>**Cluster 3 College and Career Knowledge**<br>The student will:<br>AV.7.CR.3.1 - use technology to research colleges of interest<br>AV.7.CR.3.2 - begin developing an understanding about the value of a college education<br>AV.7.CR.3.3 - begin a basic understanding of college vocabulary<br>AV.7.CR.3.4 - prepare for and conduct a career interview on a profession of choice<br>AV.7.CR.3.5 - research various careers, comparing salaries and qualifications |

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| **General Notes:** | **Special Note:** Skills acquired in this course will be implemented by the student across the curriculum. M/J Advancement Via Individual Determination 7 (M/J AVID 7) is a rigorous course offered by AVID Center, and content must be provided as specified by AVID Center. Students who are successful in this course will be on the appropriate pathway to success in M/J AVID 8. Teachers must receive training from AVID Center to teach this course.<br><br>Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.<br><br>Listed below are the competencies that must be met to satisfy the requirements of Section 1003.4156, Florida Statutes:<br><br>1.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br><br>2.0 Develop skills to locate, evaluate, and interpret career information.<br><br>3.0 Identify and demonstrate processes for making short and long term goals.<br><br>4.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills.<br><br>5.0 Understand the relationship between educational achievement and career choices/postsecondary options.<br><br>6.0 Identify a career cluster and related pathways that match career and education goals.<br><br>7.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career |

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| | goals.<br><br>8.0 Demonstrate knowledge of technology and its application in career fields/clusters. |
| **Verion Requirements:** | These requirements include, but are not limited to, the Common Core State Standards that are most relevant to this course. Standards correlated with a specific course requirement may also be addressed by other course requirements as appropriate. Some requirements in this course are not addressed in the Common Core State Standards. Other subject areas and content may be used to fulfill course requirements. This course includes an agreement related to minimum standards for behavior, attendance, and participation. |

# Course: M/J AVID 7th- 1700120

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4924.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J AVID 7th |
| **Course Number:** | 1700120 |
| **Course Abbreviated Title:** | M/J AVID 7th |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Advancement Via Individual Determination (AVID) is offered as an academic elective course that prepares students for college readiness and success. AVID is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic survival skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.<br><br>The seventh grade AVID Elective course builds upon the components of the AVID philosophy. Students will refine short- and long-term goals, and as a result, begin to understand the value in taking charge of their actions. Students will start working on intrapersonal and interpersonal skills, as well as formal and informal speech. Students will complete self-evaluations and peer evaluations, related to reading, writing, organization, and speaking. In broadening their writing practice, students will begin considering audience, purpose and form in their writing. Students will take an active role in their learning, understanding the roles of all members in assignments and collaborative lessons. They will expand their knowledge bases of |

note-taking, in relation to studying and test preparation. Students will be exposed to different field trips, guest speakers and research, to increase their knowledge of college and career options.

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.

Course student performance standards must be adopted by the district, and they must reflect appropriate Common Core State Standards.

## Related Avid Standards

**Domain CD: Character Development**
**Cluster 1 Self-Awareness**
The student will:
AV.7.CD.1.1 - utilize SLANT interactions in all classes
AV.7.CD.1.2 - utilize proper interpersonal skills, such as proper introductions and handshakes
AV.7.CD.1.3 - complete and analyze self-evaluations about learning styles, emotions and personal behaviors
AV.7.CD.1.4 - differentiate between the three basic learning styles (auditory, visual, kinesthetic)
AV.7.CD.1.5 - monitor personal decision-making as a representative of AVID
AV.7.CD.1.6 - recognize and share personal accomplishments

**Cluster 2 Goals**
The student will:
AV.7.CD.2.1 - calculate grade point average and set academic goals for success, being sure to monitor goals at the end of each grading period
AV.7.CD.2.2 - review and refine academic six-year plan for secondary education with teachers, guidance counselors, especially during registration for eighth-grade courses
AV.7.CD.2.3 - create an action plan to identify goals for attending a college or university
AV.7.CD.2.4 - understand the difference between goals and wishes
AV.7.CD.2.5 - differentiate between and write long-range, mid-range and short-range goals
AV.7.CD.2.6 - monitor guidelines of AVID school contract, in order to fulfill requirements

AV.7.CD.2.7 - identify and confront barriers in goal setting and accomplishing goals

**Cluster 3 Community and School Involvement**
The student will:
AV.7.CD.3.1 - participate in a variety of school activities/clubs and community service opportunities throughout the year

**Cluster 4 Ownership of Learning**
The student will:
AV.7.CD.4.1 - access grades online or from teachers on a regular basis
AV.7.CD.4.2 - analyze grade reports to create a study/action plan for continued academic improvement

**Domain COMM: Communication**
**Cluster 1 Speaking**
The student will:
AV.7.COMM.1.1 - understand intermediate terminology associated with public speaking
AV.7.COMM.1.2 - practice varying word choice and tone when speaking
AV.7.COMM.1.3 - utilize proper adult salutations (Dr., Mrs., Ms., etc.)
AV.7.COMM.1.4 - develop awareness of nonverbal communication when speaking, including body language and eye contact
AV.7.COMM.1.5 - understand the difference between a formal and informal speech
AV.7.COMM.1.6 - present a personal speech to build confidence in public speaking
AV.7.COMM.1.7 - draft, edit, revise and present written speeches on various topics
AV.7.COMM.1.8 - practice speaking skills in front of small groups

**Cluster 2 Listening**
The student will:
AV.7.COMM.2.1 - create rubrics to evaluate speeches
AV.7.COMM.2.2 - pose questions to the presenter
AV.7.COMM.2.3 - understand the difference between hearing and listening, and practice how to be a "critical listener" by taking Cornell notes and reflecting with class

**Domain WRI: Writing**
**Cluster 1 The Writing Process**
The student will:

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| | AV.7.WRI.1.1 - use graphic organizers and quick-writes to prepare for writing assignments<br>AV.7.WRI.1.2 - analyze prompts, in order to effectively respond to writing assignments<br>AV.7.WRI.1.3 - begin considering the audience, purpose and form for writing assignments<br>AV.7.WRI.1.4 - in collaborative groups, revise drafts or writing to improve and clarify<br>AV.7.WRI.1.5 - edit student's essays, especially checking for errors in capitalization and pronoun usage<br>AV.7.WRI.1.6 - use common editing marks during the editing process<br>AV.7.WRI.1.7 - utilize rubrics to self-evaluate and peer evaluate work<br>AV.7.WRI.1.8 - reflect on one's own writing to encourage continual growth<br><br>**Cluster 2 Writing Skills**<br>The student will:<br>AV.7.WRI.2.1 - develop a clear thesis for expository writing<br>AV.7.WRI.2.2 - engage and orient the reader by establishing a context and point of view through the development of a strong introduction<br>AV.7.WRI.2.3 - apply strategies to build and expand on vocabulary/word choice<br>AV.7.WRI.2.4 - apply strategies to develop ideas and use specific details<br>AV.7.WRI.2.5 - effectively use pronouns in writing<br>AV.7.WRI.2.6 - use proper capitalization in writing<br><br>**Cluster 3 Writing Applications**<br>The student will:<br>AV.7.WRI.3.1 - develop and strengthen writing through the creation of an informational essay<br>AV.7.WRI.3.2 - develop and strengthen writing through the creation of an memoir essay<br>AV.7.WRI.3.3 - use writing activities from content area classes to practice, develop and refine writing skills<br><br>**Cluster 4 Writing to Learn**<br>The student will:<br>AV.7.WRI.4.1 - compose well-written summaries using the writer's own words not copying the original text<br>AV.7.WRI.4.2 - differentiate between a summary and a reflection<br>AV.7.WRI.4.3 - use a variety of models to complete weekly learning logs that include thoughts, reactions and responses to class content |

AV.7.WRI.4.4 - write self-reflections on presentations, speeches and field trips

**Domain INQ: Inquiry**
**Cluster 1 Costa's Levels of Thinking**
The student will:
AV.7.INQ.1.1 - deepen understanding of Costa's Levels of Thinking and/or Bloom's Taxonomy by recognizing differences between the levels

**Cluster 2 Tutorials**
The student will:
AV.7.INQ.2.1 - understand and utilize 10 Steps in the Tutorial Process
AV.7.INQ.2.2 - understand roles of all participants in academic tutorials with peers as group members and college tutors as facilitators, twice per week
AV.7.INQ.2.3 - complete the Tutorial Request Form (TRF), including heading, source, academic vocabulary, point of confusion and level 2 question(s), prior to class
AV.7.INQ.2.4 - assume appropriate roles(student presenter or group member) during the tutorial process. The student presenter will explain new understanding of their question, and the group members will ask clarifying questions.
AV.7.INQ.2.5 - develop thought provoking questions, in order to actively participate in academic tutorials

**Cluster 3 Socratic Seminar and Philosophical Chairs**
The student will:
AV.7.INQ.3.1 - actively participate in and evaluate the process of Philosophical Chairs and/or Socratic Seminar, selecting topics/articles as appropriate
AV.7.INQ.3.2 - analyze how two or more authors, writing about the same topic, shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts in a Socratic Seminar or Philosophical Chairs discussion
AV.7.INQ.3.3 - compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words) in a Socratic Seminar or Philosophical Chairs discussion

**Domain COLL: Collaboration**
**Cluster 1 Collaborative Skills**

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| | The student will:<br>AV.7.COLL.1.1 - foster trust building skills by working with partners to complete a specified task<br>AV.7.COLL.1.2 - enhance understanding of collaboration by working in groups during team building and motivational activities of problem solving<br>AV.7.COLL.1.3 - participates in group discussions and reflections based on collaborative work (e.g., Think-Pair-Share, Jigsaw, Numbered Heads)<br>AV.7.COLL.1.4 - acknowledges new information expressed by others and, when warranted, modify views accordingly<br>AV.7.COLL.1.5 - engage in dialogue with a large, teacher-supported group discussion, to gain a deeper understanding of the topic discussed and the process used<br>AV.7.COLL.1.6 - refine inquiry, listening, and oral communication skills through a variety of activities, including tutorials, presentations, Socratic Seminars, and Philosophical Chairs<br><br>**Domain ORG: Organization**<br>**Cluster 1 Organization and Time Management**<br>The student will:<br>AV.7.ORG.1.1 - develop and maintain an organized binder, divided by subjects, which includes a supply pouch and other academically useful materials<br>AV.7.ORG.1.2 - reorganize the binder at the end of each grading period<br>AV.7.ORG.1.3 - utilize an assignment log or calendar, which shows when assignments are due, when assignments are completed and submitted, and the grade each assignment received for each class<br>AV.7.ORG.1.4 - evaluate personal time management habits and monitor effectiveness accordingly<br>AV.7.ORG.1.5 - continue compiling an academic portfolio demonstrating personal and academic growth<br>AV.7.ORG.1.6 - complete reflection/ learning log and present on contributions to academic portfolio<br>AV.7.ORG.1.7 - publish final versions of writing for the academic portfolio<br><br>**Cluster 2 Note-Taking**<br>The student will:<br>AV.7.ORG.2.1 - develop a basic understanding pertaining to the components of the CORNELL WAY focused note-taking process<br>AV.7.ORG.2.2 - take notes for each core class on a weekly basis |

AV.7.ORG.2.3 - take seven to twelve pages of quality Cornell notes per week
AV.7.ORG.2.4 - understand how to utilize Cornell notes as a study tool
AV.7.ORG.2.5 - have notes available during tutorials to support questioning
AV.7.ORG.2.6 - understand how to identify important points, use abbreviations, and use shorthand in the right column of Cornell notes
AV.7.ORG.2.7 - begin writing questions (any level) in the left column that correspond to chunks of information in the notes section
AV.7.ORG.2.8 - compose an essential question based on the standard or objective covered by the lesson
AV.7.ORG.2.9 - reflect on all notes taken during a unit of study after the test is returned and consider gaps of study that led to missed questions

**Cluster 3 Research and Technology**
The student will:
AV.7.ORG.3.1 - use technology in assignments and presentations, particularly in response to guest speaker presentation, field trip experiences, and final drafts of writing assignments
AV.7.ORG.3.2 - demonstrate command of keyboarding skills to type a minimum of three pages

**Cluster 4 Test Preparation and Test-Taking**
The student will:
AV.7.ORG.4.1 - identify and reflect on particular problems in preparing for, or taking, tests
AV.7.ORG.4.2 - identify and distinguish strategies to study for different types of exams (such as matching, true-false, multiple-choice, vocabulary, and essay tests)

**Domain REA: Reading**
**Cluster 1 Vocabulary**
The student will:
AV.7.REA.1.1 - identify key vocabulary while reading

**Cluster 2 Textual Analysis**
The student will:
AV.7.REA.2.1 - read and discuss various examples of text, including, but not limited to, articles from magazines and newspapers
AV.7.REA.2.2 - analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to its meaning

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| | AV.7.REA.2.3- determine the main idea of grade-appropriate text<br>AV.7.REA.2.4 - use multiple reading strategies, including, but not limited to, Marking the Text, annotating text and numbering paragraphs to better understand text while reading<br>AV.7.REA.2.5 - circle and underline relevant information<br>AV.7.REA.2.6 - summarize informational text<br>AV.7.REA.2.7 - connect visuals (captions, illustrations, etc.) to the surrounding text.<br><br>**Domain CR: College Readiness**<br>**Cluster 1 Guest Speakers**<br>The student will:<br>AV.7.CR.1.1 - choose guest speakers who represent careers of interest and prepare questions for the speakers prior to their visit when appropriate<br>AV.7.CR.1.2 - use listening skills during presentations by guest speakers from the school, community and college, which focus on the value of postsecondary education and choosing a college<br>AV.7.CR.1.3 - draft, peer edit, revise and create a final draft of a thank-you letter to guest speakers<br><br>**Cluster 2 Field Trips**<br>The student will:<br>AV.7.CR.2.1 - participate in field trips, such as college/university visits that are different from the previous year, feeder high school trips for a shadow day to visit an AP/IB/AICE/DE class, and feeder elementary visits for service learning and/or a trip that focuses on careers<br>AV.7.CR.2.2 - use skills of listening and observing during field trip experiences<br><br>**Cluster 3 College and Career Knowledge**<br>The student will:<br>AV.7.CR.3.1 - use technology to research colleges of interest<br>AV.7.CR.3.2 - begin developing an understanding about the value of a college education<br>AV.7.CR.3.3 - begin a basic understanding of college vocabulary<br>AV.7.CR.3.4 - prepare for and conduct a career interview on a profession of choice<br>AV.7.CR.3.5 - research various careers, comparing salaries and qualifications |
| **General Notes:** | **Special Note:** Skills acquired in this course will be implemented by the student across the curriculum. M/J Advancement Via Individual |

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| | Determination 7 (M/J AVID 7) is a rigorous course offered by AVID Center, and content must be provided as specified by AVID Center. Students who are successful in this course will be on the appropriate pathway to success in M/J AVID 8. Teachers must receive training from AVID Center to teach this course. |
| **Verion Requirements:** | These requirements include, but are not limited to, the Common Core State Standards that are most relevant to this course. Standards correlated with a specific course requirement may also be addressed by other course requirements as appropriate. Some requirements in this course are not addressed in the Common Core State Standards. Other subject areas and content may be used to fulfill course requirements. This course includes an agreement related to minimum standards for behavior, attendance, and participation. |

# Course: M/J AVID 6th- 1700110

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4922.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J AVID 6th |
| **Course Number:** | 1700110 |
| **Course Abbreviated Title:** | M/J AVID 6th |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Status:** | State Board Approved |
| **Version Description:** | Advancement Via Individual Determination (AVID) is offered as an academic elective course that prepares students for college readiness and success. AVID is scheduled during the regular school day as a year-long course. Each week students receive instruction utilizing a rigorous college preparatory curriculum provided by AVID Center, tutor-facilitated study groups, motivational activities and academic success skills. In AVID, students participate in activities that incorporate strategies focused on writing, inquiry, collaboration, and reading to support their academic growth.<br><br>The sixth grade AVID Elective course is an introduction to the AVID philosophy. Students will develop awareness of the values accompanying academic goals and success. The course will focus on building self-confidence and communication skills in working with peers and adults. Students will be exposed to reading strategies that will assist in vocabulary building and understanding a variety of texts, and will also focus on prewriting techniques, summary writing and structural components of note-taking. The students will increase college and career awareness through guest speaker presentations, field trip opportunities and research. |

This course shall integrate the Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the content and processes of the subject matter.

Course student performance standards must be adopted by the district, and they must reflect appropriate Common Core State Standards.

## Related Avid Standards

**Domain CD: Character Development**
**Cluster 1 Self-Awareness**
The student will:
AV.6.CD.1.1 - develop an understanding of SLANT interactions (Sit in the Front, Lean Forward, Ask Questions, Nod your Head, Talk to the Teacher) and apply strategy in all classes
AV.6.CD.1.2 - develop awareness of proper behaviors in varied settings
AV.6.CD.1.3 - complete self-evaluations about conflict management, personal behavior, accomplishments and interactions with others

**Cluster 2 Goals**
The student will:
AV.6.CD.2.1 - understand how to calculate grade point average
AV.6.CD.2.2 - create an academic six-year plan for secondary education
AV.6.CD.2.3 - read short biographies or articles that focus on goal setting
AV.6.CD.2.4 - understand how to set goals using GPA (Goal, Plan, Action) outline
AV.6.CD.2.5 - monitor guide lines of AVID school contract, in order to fulfill requirements
AV.6.CD.2.6 - practice setting intermediate and short-range goals with GPA outlines, projects, reading assignments, and/or homework

**Cluster 3 Community and School Involvement**
The student will:
AV.6.CD.3.1 - identify various opportunities to become involved in and contribute to the school/community

**Domain COMM: Communication**
**Cluster 1 Speaking**

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| | The student will:<br>AV.6.COMM.1.1 - understand basic terminology associated with public speaking<br>AV.6.COMM.1.2 - practice monitoring word choice when speaking<br>AV.6.COMM.1.3 - understand proper adult salutations (Dr., Mrs., Ms., etc.)<br>AV.6.COMM.1.4 - develop awareness of nonverbal communication when speaking<br>AV.6.COMM.1.5 - participate in impromptu speeches to build confidence in public speaking<br>AV.6.COMM.1.6 - practice speaking skills in front of small groups<br><br>**Domain WRI: Writing**<br>**Cluster 1 The Writing Process**<br>The student will:<br>AV.6.WRI.1.1 - use pre-writing techniques to brainstorm ideas for writing<br>AV.6.WRI.1.2 - revise drafts or writing to improve and clarify<br>AV.6.WRI.1.3 - edit students' essays, especially checking for errors in capitalization and pronoun usage<br>AV.6.WRI.1.4 - utilize rubrics to self-evaluate writing<br><br>**Cluster 2 Writing Skills**<br>The student will:<br>AV.6.WRI.2.1 - understand strategies to write effective paragraphs<br>AV.6.WRI.2.2 - apply strategies to build and expand on vocabulary/word choice<br>AV.6.WRI.2.3 - effectively use pronouns in writing<br>AV.6.WRI.2.4 - use proper capitalization in writing<br><br>**Cluster 3 Writing Applications**<br>The student will:<br>AV.6.WRI.3.1 - develop and strengthen writing through the creation of a narrative essay<br>AV.6.WRI.3.2 - develop and strengthen writing through the creation of an expository essay<br><br>**Cluster 4 Writing to Learn**<br>The student will:<br>AV.6.WRI.4.1 - write summaries which include only the most important information<br>AV.6.WRI.4.2 - reflect on learning from all content areas through the use of learning logs |

**Domain INQ: Inquiry**
**Cluster 1 Costa's Levels of Thinking**
The student will:
AV.6.INQ.1.1 - develop an awareness of Costa's Levels of Thinking and/or Bloom's Taxonomy

**Cluster 2 Tutorials**
The student will:
AV.6.INQ.2.1 - establish a foundational understanding for collaborative tutorial skills
AV.6.INQ.2.2 - participate in academic tutorials with peers as group members and college tutors as facilitators, twice per week

**Cluster 3 Socratic Seminar and Philosophical Chairs**
The student will:
AV.6.INQ.3.1 - introduce the basic components of Philosophical Chairs and Socratic Seminars using topics based on student interest
AV.6.INQ.3.2 - compare and contrast one author's presentation of events with that of another (e.g., a memoir written by an author and a biography of the same person) in a Socratic Seminar or Philosophical Chairs discussion
AV.6.INQ.3.3 - Integrate information presented in different media or formats (e.g., visually, quantitatively), as well as in words, to develop a coherent understanding of a topic or issue in a Socratic Seminar or Philosophical Chairs discussion

**Domain COLL: Collaboration**
**Cluster 1 Collaborative Skills**
The student will:
AV.6.COLL.1.1 - participate in team building lessons to learn about valuing and effectively working with others
AV.6.COLL.1.2 - follow established rules for engaging in collaborative activities
AV.6.COLL.1.3 - engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners

**Domain ORG: Organization**
**Cluster 1 Organization and Time Management**
The student will:
AV.6.ORG.1.1 - develop and maintain an organized binder, divided by subjects, which includes a supply pouch and other academically

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| | useful materials<br>AV.6.ORG.1.2 - keep calendars and/or planners for each class which show assignments<br>AV.6.ORG.1.3 - begin an academic portfolio, demonstrating personal and academic growth<br>AV.6.ORG.1.4 - publish final versions of writing for the academic portfolio<br><br>**Cluster 2 Note-Taking**<br>The student will:<br>AV.6.ORG.2.1 - understand the history and functionality of the Cornell note-taking method<br>AV.6.ORG.2.2 - utilize Cornell note-taking methods in most classes<br>AV.6.ORG.2.3 - take four to nine pages of quality Cornell notes per week<br>AV.6.ORG.2.4 - develop an understanding of the organization surrounding right-column notes<br>AV.6.ORG.2.5 - develop an understanding of the organization surrounding left-column notes for main ideas and questions<br>AV.6.ORG.2.6 - develop an understanding of the summary in Cornell note-taking<br><br>**Cluster 3 Research and Technology**<br>The student will:<br>AV.6.ORG.3.1 - use technology in assignments and presentations<br><br>**Cluster 4 Test Preparation and Test-Taking**<br>The student will:<br>AV.6.ORG.4.1 - develop an understanding of how to prepare for content area final exams, focusing on before, during and after an exam<br><br>**Domain REA: Reading**<br>**Cluster 1 Vocabulary**<br>The student will:<br>AV.6.REA.1.1 - identify key vocabulary while reading<br><br>**Cluster 2 Textual Analysis**<br>The student will:<br>AV.6.REA.2.1 - read and discuss various examples of text, including, but not limited to, articles from magazines and newspapers<br>AV.6.REA.2.2 - determine the main idea of grade appropriate text<br>AV.6.REA.2.3 - use multiple reading strategies, including but not |

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| | limited to, Marking the Text and numbering paragraphs to better understand text<br>AV.6.REA.2.4 - summarize informational text<br>AV.6.REA.2.5 - develop awareness of visuals (captions, illustrations, etc.)<br><br>**Domain CR: College Readiness**<br>**Cluster 1 Guest Speakers**<br>The student will:<br>AV.6.CR.1.1 - choose guest speakers who represent careers of interest and prepare questions for the speakers with teacher support<br>AV.6.CR.1.2 - use listening skills during presentations by guest speakers, regarding career preparation and attendance at four-year colleges and universities<br>AV.6.CR.1.3 - write to reflect on learning from guest speaker presentations<br><br>**Cluster 2 Field Trips**<br>The student will:<br>AV.6.CR.2.1 - participate in field trips, such as visiting a career/technical education center, community college or cultural/arts venue<br>AV.6.CR.2.2 - use skills of listening and observing during field trip experiences<br>AV.6.CR.2.3 - write to reflect on learning from field trip experience(s)<br><br>**Cluster 3 College and Career Knowledge**<br>The student will:<br>AV.6.CR.3.1 - use technology to understand differences in postsecondary institutions |
| **General Notes:** | **Special Note:** Skills acquired in this course will be implemented by the student across the curriculum. M/J Advancement Via Individual Determination 6 (M/J AVID 6) is a rigorous course offered by AVID Center, and content must be provided as specified by AVID Center. Students who are successful in this course will be on the appropriate pathway to success in M/J AVID 7 and M/J AVID 8. Teachers must receive training from AVID Center to teach this course. |
| **Verion Requirements:** | These requirements include, but are not limited to, the Common Core State Standards that are most relevant to this course. Standards correlated with a specific course requirement may also be addressed by other course requirements as appropriate. Some requirements in this course are not addressed in the Common Core State Standards. |

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| | Other subject areas and content may be used to fulfill course requirements. This course includes an agreement related to minimum standards for behavior, attendance, and participation. |

# Course: M/J Critical Thinking, Problem Solving, and Learning Strategies- 1700100

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse2430.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Critical Thinking, Problem Solving, and Learning Strategies |
| **Course Number:** | 1700100 |
| **Course Abbreviated Title:** | M/J CRIT THINK |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | State Board Approved |
| **General Notes:** | The purpose of this course is to enable students to develop learning strategies, critical-thinking skills, and problem-solving skills to enhance their performance in academic and nonacademic endeavors.<br><br>The content should include, but not be limited to, the following:<br><br>• strategies for acquiring, storing, and retrieving information<br>• strategies for oral and written communication<br>• critical-thinking operations, processes, and enabling skills<br>• problem-solving skills and strategies<br>• strategies for linking new information with prior knowledge |

## STANDARDS (22)

LACC.7.W.1.1: Write arguments to support claims with clear reasons and relevant evidence.

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| LACC.68.RH.1.1: | Cite specific textual evidence to support analysis of primary and secondary sources. |
| LACC.68.RST.1.1: | Cite specific textual evidence to support analysis of science and technical texts. |
| LACC.68.RST.1.2: | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| LACC.68.RST.1.3: | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| LACC.7.RI.1.1: | Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. |
| LACC.7.RI.2.6: | Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others. |
| LACC.7.RI.3.7: | Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words). |
| LACC.7.RL.2.4: | Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama. |
| LACC.7.SL.1.1b: | Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed. |
| LACC.7.SL.1.1c: | Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed. |
| LACC.7.SL.1.1d: | Acknowledge new information expressed by others and, when warranted, modify their own views. |
| LACC.7.SL.2.4: | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear |

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| | pronunciation. |
| LACC.7.W.1.2a: | Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. |
| LACC.7.W.1.2b: | Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples. |
| LACC.7.W.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) |
| LACC.7.W.2.5: | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 7.) |
| MACC.K12.MP.1.1: | **Make sense of problems and persevere in solving them.**<br><br>Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify |

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| | correspondences between different approaches. |
| MACC.K12.MP.3.1: | **Construct viable arguments and critique the reasoning of others.**<br><br>Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments. |
| MACC.K12.MP.6.1: | **Attend to precision.**<br><br>Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions. |

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| **SC.7.N.1.1:** | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.<br>Remarks/Examples<br>CCSS Connections: LACC.68.RST.1.3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. |
| **SC.7.N.1.4:** | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| **SC.7.N.1.7:** | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. |

## RELATED GLOSSARY TERM DEFINITIONS (6)

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| **Dependent variable:** | Factor being measured or observed in an experiment. |
| **Experiment:** | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| **Independent variable:** | The factor that is changed in an experiment in order to study changes in the dependent variable. |
| **Investigation :** | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Observation :** | What one has observed using senses or instruments. |
| **Variable:** | An event, condition, or factor that can be changed or controlled in order to study or test a hypothesis in a scientific experiment. |

# Course: Career Research and Decision Making-1700060

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3848.aspx

## BASIC INFORMATION

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| **Course Title:** | Career Research and Decision Making |
| **Course Number:** | 1700060 |
| **Course Abbreviated Title:** | CAR RESA&DECI MAK S |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Research and Critical Thinking **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | The purpose of this course is to enable students to explore careers/career clusters and make informed career choices. Activities enable students to increase self-awareness and develop the skills needed to successfully plan for postsecondary education and the workplace. Career assessment should include interests, aptitudes, and basic skills. Work-based learning strategies appropriate for this course include job shadowing, field trips, and mentors. Work-based activities allow students to evaluate their career choices as they relate to actual careers at the worksite.<br><br>The content should include, but not be limited to, the following:<br><br>• Self-awareness to include interests, values, skills, learning styles, etc.<br>• Goal-setting and decision-making processes<br>• Exploring careers/career clusters and educational |

requirements
- Postsecondary education and training opportunities
- Workplace skills such as communication, teamwork, problem-solving, time management, computer, etc.
- Career and education planning

**Special Note:**
Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.

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

1. Describe the influences that societal, economic, and technological changes have on employment trends and future training.
2. Develop skills to locate, evaluate, and interpret career information.
3. Identify and demonstrate processes for making short and long term goals.
4. Demonstrate employability skills such as working in a group, problem-solving and organizational skills.
5. Understand the relationship between educational achievement and career choices/postsecondary options.
6. Identify a career cluster and related pathways that match career and education goals.
7. Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.
8. Demonstrate knowledge of technology and its application in career fields/clusters.

# Course: M/J Fitness - Grade 6- 1508000

## BASIC INFORMATION

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| **Course Title:** | M/J Fitness - Grade 6 |
| **Course Number:** | 1508000 |
| **Course Abbreviated Title:** | M/J Fitness |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This fitness course is designed for 6th grade students and intended to be 18 weeks in length. The purpose of this course is to provide students with the knowledge, skills, and values they need to become healthy and physically active for a lifetime. This course addresses both the health and skill-related components of physical fitness which are critical for students' success. |
| **General Notes:** | **Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing |

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| | opportunities (claims and evidence). |

STANDARDS (42)

**HE.6.B.3 Accessing Information - Demonstrate the ability to access valid health information, products, and services to enhance health.**

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| **HE.6.B.3.1 :** | Examine the validity of health information, and determine the cost of health products, and services.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Accessing Information - Demonstrate the ability to access valid health information, products, and services to enhance health.<br>Remarks/Examples<br>Advertisements, Internet, infomercials, articles, flyers, diet supplements, generic vs. name brand, individual fitness plan vs. gym membership, and private lessons vs. recreational play. |

**HE.6.B.6 Goal Setting - Demonstrate the ability to use goal-setting skills to enhance health.**

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| **HE.6.B.6.1 :** | Use various methods to measure personal health status.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Goal Setting - Demonstrate the ability to use goal-setting skills to enhance health.<br>Remarks/Examples<br>BMI, surveys, heart-rate monitors, pedometer, blood-pressure cuff, and stress-management techniques. |

**HE.6.P.7 Self Management - Demonstrate the ability to practice advocacy, health-enhancing behaviors, and avoidance or reduction of health risks for oneself.**

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| **HE.6.P.7.1 :** | Explain the importance of assuming responsibility for personal-health behaviors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Self Management - Demonstrate the ability to practice advocacy, health-enhancing behaviors, and avoidance or reduction of health risks for oneself.<br>Remarks/Examples<br>Medical/dental checkups, resisting peer pressure, and healthy |

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| | relationships. |

**LACC.6.L.3 Vocabulary Acquisition and Use**

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| **LACC.6.L.3.6 :** | Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.<br>Cognitive Complexity: Level 1: Recall l Date Adopted or Revised: 12/10<br>Belongs to: Vocabulary Acquisition and Use |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**MACC.6.RP.1 Understand ratio concepts and use ratio reasoning to solve problems.**

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| **MACC.6.RP.1.1 :** | Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."*<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Understand ratio concepts and use ratio reasoning to solve problems. |

**PE.6.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.6.C.2.1 :** | Identify at least two movements or activities which will lead to improvement in each of the health-related components of fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples |

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| | The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.6.C.2.10 :** | Recognize the difference between fact and fallacy as it relates to consumer physical fitness products and programs.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples of these are weight- loss pills, food labels and exercise equipment. |
| **PE.6.C.2.11 :** | Prepare a log noting the food intake, calories consumed and energy expended through physical activity and describe results.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.12 :** | List the components of skill-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The components of skill-related fitness are speed, coordination, balance, power, agility and reaction time. |
| **PE.6.C.2.13 :** | List appropriate warm-up and cool-down techniques and the reasons for using them.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.2 :** | List safety procedures that should be followed when engaging in activities to improve the health-related components of fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |

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| | Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.6.C.2.22 :** | List the three different types of heat illnesses associated with fluid loss.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The three types of heat illnesses are heat cramps, heat exhaustion and heat stroke. |
| **PE.6.C.2.3 :** | Describe how each of the health-related components of fitness are improved through the application of training principles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.6.C.2.4 :** | Describe the long-term benefits of regular physical activity.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples of types of long-term benefits are physical, cognitive and emotional. |
| **PE.6.C.2.5 :** | Describe the training principles of overload, progression and specificity.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement |

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| | performance in a variety of physical activities. |
| **PE.6.C.2.6 :** | Classify activities as aerobic or anaerobic.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.7 :** | Determine personal target heart-rate zone and explain how to adjust intensity level to stay within the desired range.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.8 :** | List methods of monitoring intensity level during aerobic activity.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples of monitoring intensity levels are a talk test, rate of perceived exertion and taking one's heart rate/pulse. |
| **PE.6.C.2.9 :** | Explain the effects of physical activity on heart rate during exercise, recovery phase and while the body is at rest.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |

## PE.6.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.

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| **PE.6.M.1.12 :** | Use proper safety practices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of safety practices are the use of sun screen, hydration, selection of clothing and correct biomechanics. |
| **PE.6.M.1.1 :** | Demonstrate movements designed to improve and maintain cardiorespiratory endurance, muscular strength and endurance, flexibility and proper body composition. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.11 :** | Apply proper warm-up and cool-down techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.2 :** | Perform at least three different activities that achieve target heart rate.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.3 :** | Demonstrate the principles of training (overload, specificity and progression) and conditioning (frequency, intensity, time and type) for specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.5 :** | Perform movements using a variety of equipment which lead to improved or maintained muscular strength and endurance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

## PE.6.L.3 Participate regularly in physical activity.

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| **PE.6.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.3 :** | Participate in a variety of fitness, wellness, gymnastics and dance activities that promote the components of health-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |

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| **PE.6.L.3.6 :** | Identify a variety of fitness, wellness, gymnastics and dance activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.6.L.4 Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness.**

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| **PE.6.L.4.1 :** | Create, implement and assess a personal fitness program in collaboration with a teacher.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.6.L.4.2 :** | Develop goals and strategies for a personal physical fitness program.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.6.L.4.3 :** | Use available technology to assess, design and evaluate a personal physical-activity plan.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.6.L.4.4 :** | Develop a personal fitness program including a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.6.L.4.5 :** | Identify health-related problems associated with low levels of cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

**PE.6.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.6.R.5.1 :** | List ways that peer pressure can be positive and negative.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse |

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| | backgrounds and abilities in physical-activity settings.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.6.R.5.4 :** | Describe the personal, social and ethical behaviors that apply to specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.6.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.6.R.6.1 :** | Identify an opportunity for participation in a physical activity outside of the school setting that contributes to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.6.R.6.2 :** | Identify the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits of participation are physical, |

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| | mental, emotional and social. |
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# Course: M/J Extreme/Alternative Sports - Grade 8- 1508400

## BASIC INFORMATION

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| **Course Title:** | M/J Extreme/Alternative Sports - Grade 8 |
| **Course Number:** | 1508400 |
| **Course Abbreviated Title:** | M/J Ext/Alt - 8 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This course is designed for 8th grade students and is intended to be 18 weeks in length. The purpose of this course is to provide the skills, knowledge, and motivation necessary for participation in non-traditional forms of physical activity. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle. |
| **General Notes:** | **Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from |

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| | the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

STANDARDS (33)

**HE.8.B.5 Decision Making - Demonstrate the ability to use decision-making skills to enhance health.**

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| **HE.8.B.5.5 :** | Evaluate the outcomes of a health-related decision.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Decision Making - Demonstrate the ability to use decision-making skills to enhance health.<br>Remarks/Examples<br>Addiction from alcohol consumption, brain damage from inhalant use, pregnancy from sexual activity, and weight management from proper nutrition. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**MACC.8.SP.1 Investigate patterns of association in bivariate data.**

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| **MACC.8.SP.1.4 :** | Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date |

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| | Adopted or Revised: 12/10<br>Belongs to: Investigate patterns of association in bivariate data. |

## PE.8.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.

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| **PE.8.C.2.2 :** | Identify basic rules for alternative/extreme sports activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are setting up to start, violating rules and keeping accurate score. |
| **PE.8.C.2.3 :** | Explain basic offensive and defensive strategies in individual/dual sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.5 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.6 :** | Identify the critical elements for successful performance in a variety of sport skills or physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.7 :** | List specific safety procedures and equipment necessary for a variety of sport skills and physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.8 :** | Describe how movement skills and strategies learned in one physical activity can be transferred and used in other physical |

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| | activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are volleyball and tennis serve and surfing and skate boarding. |

**PE.8.L.3 Participate regularly in physical activity.**

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| **PE.8.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.3 :** | Participate in a variety of individual/dual and alternative/extreme sport activities that promote health-related components of fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.8.L.3.4 :** | Identify the in-school opportunities for participation in individual/dual and alternative/extreme sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.5 :** | Identify the community opportunities for participation in individual/dual and alternative/extreme sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.6 :** | Identify a variety of individual/dual and alternative/extreme sport activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.8.L.4 Develop and implement a personal fitness program to achieve and maintain a**

**health-enhancing level of physical fitness.**

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| **PE.8.L.4.3 :** | Use available technology to assess, design and evaluate a personal physical fitness program.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

**PE.8.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.8.M.1.1 :** | Demonstrate competency in motor skills for a variety of individual/dual and extreme/alternative sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.2 :** | Demonstrate critical elements when striking with an object or implement.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.3 :** | Demonstrate body management for successful participation in a variety of modified games and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of body management are balance and agility. |
| **PE.8.M.1.4 :** | Apply principles of biomechanics necessary for safe and successful performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.5 :** | Demonstrate appropriate speed and generation of force when distance running, sprinting, throwing, jumping, striking or kicking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.6 :** | Demonstrate offensive, defensive and transition strategies and tactics.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13 |

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| | Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.7 :** | Apply skill-related components of balance, reaction time, agility, coordination, power and speed to enhance performance levels.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.8 :** | Apply technology to evaluate, monitor and improve individual motor skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of technology are Excel spreadsheets or web based programs to chart or log activities, heart rate monitors, videotapes and digital cameras. |
| **PE.8.M.1.9 :** | Select and utilize appropriate safety equipment.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

**PE.8.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.8.R.5.1 :** | List ways to act independently of peer pressure during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.8.R.5.2 :** | Develop strategies for including persons of diverse backgrounds and abilities while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.8.R.5.3 :** | Demonstrate sportsmanship during game situations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and |

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| | and defeat. |
| **PE.8.R.5.4 :** | Maintain appropriate personal, social and ethical behavior while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples are respecting teammates, opponents and officials and accepting both victory and defeat. |
| **PE.8.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.8.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.8.R.6.1 :** | Discuss opportunities for participation in a variety of physical activities outside of the school setting that contribute to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.8.R.6.2 :** | Describe the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits are physical, mental, emotional and social. |
| **PE.8.R.6.3 :** | Compare and contrast games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self- |

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| | expression, and/or social interaction. |

# Course: M/J Educational Gymnastics/Dance - Grade 6- 1508100

## BASIC INFORMATION

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| **Course Title:** | M/J Educational Gymnastics/Dance - Grade 6 |
| **Course Number:** | 1508100 |
| **Course Abbreviated Title:** | M/J Ed Gym/Dance - 6 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This course is designed for 6th grade students and intended to be 18 weeks in length. The purpose of this course is to provide students with the knowledge, skills, and values necessary to design and perform educational gymnastics and dance sequences in a variety of settings. "Educational" gymnastics is intended to have an emphasis on body awareness, body management, maximum participation, high success rates, and open-ended responses from students. Integrating fitness throughout the content is critical to the success of the course. |
| **General Notes:** | **Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments. |

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| | 4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

## STANDARDS (35)

**HE.6.C.2 Internal and External Influence - Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.**

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| **HE.6.C.2.7 :** | Investigate cultural changes related to health beliefs and behaviors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Internal and External Influence - Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.<br>Remarks/Examples<br>School breakfast programs, fast- food menus, and nutritional guidelines for snack machines, fitness programs, and school wellness programs. |

**LACC.6.L.3 Vocabulary Acquisition and Use**

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| **LACC.6.L.3.6 :** | Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.<br>Cognitive Complexity: Level 1: Recall l Date Adopted or Revised: 12/10<br>Belongs to: Vocabulary Acquisition and Use |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**MACC.6.RP.1 Understand ratio concepts and use ratio reasoning to solve problems.**

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| **MACC.6.RP.1.1 :** | Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."*<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Understand ratio concepts and use ratio reasoning to solve problems. |

**PE.6.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.6.C.2.12 :** | List the components of skill-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The components of skill-related fitness are speed, coordination, balance, power, agility and reaction time. |
| **PE.6.C.2.13 :** | List appropriate warm-up and cool-down techniques and the reasons for using them.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.14 :** | List terminology and etiquette in educational gymnastics or dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.15 :** | Choreograph basic dance or gymnastic sequences alone, with a partner or in a small group.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.16 :** | Evaluate the movement performance of others.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical |

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| | principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.17 :** | Describe the mechanical principles of balance, force and leverage and how they relate to the performance of skills in gymnastics or dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.18 :** | List and describe the risks and safety procedures in gymnastics and dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.19 :** | Recognize the relationship between music and dance or gymnastics skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.20 :** | Know how improvisation is used to create movements for choreography.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.21 :** | Identify the precautions to be taken when exercising in extreme weather and/or environmental conditions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |

## PE.6.L.3 Participate regularly in physical activity.

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| **PE.6.L.3.3 :** | Participate in a variety of fitness, wellness, gymnastics and dance activities that promote the components of health-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples |
| | The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility |

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| | and body composition. |
| **PE.6.L.3.4 :** | Identify the in-school opportunities for physical activity that promote fitness, wellness, gymnastics and dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.5 :** | Identify the community opportunities for physical activity that promote fitness, wellness, gymnastics and dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.6 :** | Identify a variety of fitness, wellness, gymnastics and dance activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.6.M.1 Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance).**

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| **PE.6.M.1.10 :** | Design and perform different group dance and rhythm sequences that incorporate equipment.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.11 :** | Apply proper warm-up and cool-down techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.12 :** | Use proper safety practices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance).<br>Remarks/Examples<br>Some examples of safety practices would be the use of sun screen, hydration, selection of clothing, and correct biomechanics. |
| **PE.6.M.1.13 :** | Use technology to assess, enhance, and maintain motor skill performance. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.5 :** | Perform movements using a variety of equipment which lead to improved or maintained muscular strength and endurance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.6 :** | Design and perform smooth, flowing sequences of stunts, tumbling, and rhythmic patterns that combine traveling, rolling, balancing, and transfer of weight.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.7 :** | Design and perform a routine to rhythm with a partner or a group while incorporating gymnastic actions and various forms of locomotion on small and/or large apparatus.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.8 :** | Perform complex dance sequences from a variety of dances accurately and with correct technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance).<br>Remarks/Examples<br>Some examples of dances would be folk, square, step, and line. |
| **PE.6.M.1.9 :** | Create and perform a rhythmic movement sequence while working with a partner or group.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |

**PE.6.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.6.R.5.1 :** | List ways that peer pressure can be positive and negative.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse backgrounds and abilities in physical-activity settings.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.6.R.5.4 :** | Describe the personal, social and ethical behaviors that apply to specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

## PE.6.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

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| **PE.6.R.6.1 :** | Identify an opportunity for participation in a physical activity outside of the school setting that contributes to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.6.R.6.2 :** | Identify the potential benefits of participation in a variety of physical activities. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits of participation are physical, mental, emotional and social. |
| **PE.6.R.6.3 :** | Participate in games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

# Course: M/J Comprehensive - Grades 7/8-1508700

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive - Grades 7/8 |
| **Course Number:** | 1508700 |
| **Course Abbreviated Title:** | M/J Comp 7/8 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This course is designed for 7th and 8th grade students and is intended to be 18 weeks in length. The purpose of this course is to build on previously acquired knowledge, skills and values necessary for the implementation and maintenance of a physically active lifestyle. The course content provides exposure to a variety of movement opportunities and experiences which include, but is not limited to: Outdoor Pursuits/Aquatics, Individual/Dual Sports and Alternative/Extreme Sports. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle. |
| **General Notes:** | **Special Note:**<br>**Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex. |

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| | 2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

STANDARDS (50)

**HE.8.B.6 Goal Setting - Demonstrate the ability to use goal-setting skills to enhance health.**

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| **HE.8.B.6.4 :** | Describe how personal health goals can vary with changing abilities, priorities, and responsibilities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Goal Setting - Demonstrate the ability to use goal-setting skills to enhance health.<br>Remarks/Examples<br>Weight reduction, cost of healthier food, availability of exercise equipment, and general health. |

**HE.8.C.1 Core Concepts - Comprehend concepts related to health promotion and disease prevention to enhance health.**

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| **HE.8.C.1.5 :** | Identify major chronic diseases that impact human body systems.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Core Concepts - Comprehend concepts related to health promotion and disease prevention to enhance health.<br>Remarks/Examples<br>Cancer, hypertension and coronary artery disease, asthma, and diabetes. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10 |

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| | Belongs to: Craft and Structure |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.1 :** | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and, when warranted, modify their own views.<br><br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**MACC.7.SP.3 Investigate chance processes and develop, use, and evaluate probability models.**

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| **MACC.7.SP.3.5 :** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.<br>Cognitive Complexity: Level 1: Recall l Date Adopted or Revised: 12/10<br>Belongs to: Investigate chance processes and develop, use, and evaluate probability models. |

**PE.7.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of**

**physical activities.**

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| **PE.7.C.2.6 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.9 :** | Describe how movement skills learned in one physical activity can be transferred and used in other physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>An example is slow-pitch softball and volleyball underhand serve. |

**PE.7.L.3 Participate regularly in physical activity.**

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| **PE.7.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.7.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.7.M.1.1 :** | Participate in modified versions of team sports demonstrating mature patterns while using a variety of manipulative skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of manipulative skills are throwing, catching, kicking, punting, trapping, dribbling, volleying and striking. |
| **PE.7.M.1.2 :** | Use basic offensive and defensive strategies while playing modified versions of a variety of sports and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, |

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| | movement forms from a variety of categories.<br>Remarks/Examples<br>An example of a modified version of a sport or activity is a small sided game. |
| **PE.7.M.1.3 :** | Demonstrate appropriate relationships between the body and an opponent in dynamic game situations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples are staying between opponent and goal and moving between opponent and the ball. |
| **PE.7.M.1.6 :** | Demonstrate the critical elements in specialized skills related to a variety of team sports or outdoor pursuits activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples are overhand throw for distance/force, forearm passing in volleyball, steering a canoe, batting and the correct stance in archery. |
| **PE.7.M.1.8 :** | Apply technology to evaluate, monitor and improve individual skill performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of technology are Excel spreadsheets or web based programs to chart or log activities, heart rate monitors, videotapes and digital cameras. |
| **PE.7.M.1.9 :** | Demonstrate principles of biomechanics necessary for safe and successful performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

## PE.8.L.3 Participate regularly in physical activity.

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| **PE.8.L.3.5 :** | Identify the community opportunities for participation in individual/dual and alternative/extreme sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.3 :** | Participate in a variety of individual/dual and alternative/extreme sport activities that promote health-related components of fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.8.L.3.4 :** | Identify the in-school opportunities for participation in individual/dual and alternative/extreme sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.6 :** | Identify a variety of individual/dual and alternative/extreme sport activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

## PE.7.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.

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| **PE.7.R.5.1 :** | Identify situations in which peer pressure could negatively impact one's own behavior choices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse backgrounds and abilities in physical-activity settings.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13 |

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| | Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.7.R.5.4 :** | List examples of appropriate personal, social and ethical behaviors that apply to specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.7.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.7.R.6.2 :** | Discuss the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits are physical, mental, emotional and social. |
| **PE.7.R.6.3 :** | Participate in games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

**PE.8.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.8.C.2.3 :** | Explain basic offensive and defensive strategies in individual/dual sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13 |

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| | Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.4 :** | Explain basic offensive and defensive strategies in alternative/extreme sports activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.5 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.6 :** | Identify the critical elements for successful performance in a variety of sport skills or physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.7 :** | List specific safety procedures and equipment necessary for a variety of sport skills and physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |

## PE.8.L.4 Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness.

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| **PE.8.L.4.1 :** | Create, implement and assess a personal fitness program in collaboration with a teacher.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.8.L.4.2 :** | Develop goals and strategies for a personal physical fitness program.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.8.L.4.3 :** | Use available technology to assess, design and evaluate a personal physical fitness program. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.8.L.4.4 :** | Develop a personal fitness program including a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.8.L.4.5 :** | Identify health-related problems associated with low levels of cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

**PE.8.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.8.M.1.2 :** | Demonstrate critical elements when striking with an object or implement.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.3 :** | Demonstrate body management for successful participation in a variety of modified games and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of body management are balance and agility. |
| **PE.8.M.1.4 :** | Apply principles of biomechanics necessary for safe and successful performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.5 :** | Demonstrate appropriate speed and generation of force when distance running, sprinting, throwing, jumping, striking or kicking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.8.M.1.6 :** | Demonstrate offensive, defensive and transition strategies and |

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| | tactics.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

**PE.8.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.8.R.5.1 :** | List ways to act independently of peer pressure during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.8.R.5.2 :** | Develop strategies for including persons of diverse backgrounds and abilities while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.8.R.5.3 :** | Demonstrate sportsmanship during game situations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.8.R.5.4 :** | Maintain appropriate personal, social and ethical behavior while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples are respecting teammates, opponents and officials and accepting both victory and defeat. |
| **PE.8.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

## PE.8.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

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| **PE.8.R.6.1 :** | Discuss opportunities for participation in a variety of physical activities outside of the school setting that contribute to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.8.R.6.2 :** | Describe the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits are physical, mental, emotional and social. |
| **PE.8.R.6.3 :** | Compare and contrast games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

# Course: M/J Comprehensive - Grades 6/7-1508600

## BASIC INFORMATION

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| **Course Title:** | M/J Comprehensive - Grades 6/7 |
| **Course Number:** | 1508600 |
| **Course Abbreviated Title:** | M/J Comp 6/7 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This course is designed for 6th and 7th grade students and intended to be 18 weeks in length. The purpose of this course is to provide a foundation of knowledge, skills, and values necessary for the development of a physically active lifestyle. The course content provides exposure to a variety of movement opportunities and experiences which includes, but is not limited to: Fitness Activities, Educational Gymnastics and Dance, and Team Sports. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle. |
| **General Notes:** | **Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons. |

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| | 3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

STANDARDS (49)

**HE.7.B.6 Goal Setting - Demonstrate the ability to use goal-setting skills to enhance health.**

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| **HE.7.B.6.3 :** | Explain strategies and skills needed to assess progress and maintenance of a personal health goal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Goal Setting - Demonstrate the ability to use goal-setting skills to enhance health.<br>Remarks/Examples<br>Journaling, daily checklists, calorie counting, use of pedometers, participation in support groups, and rewarding milestones. |

**HE.7.P.8 Advocacy - Demonstrate the ability to advocate for individual, peer, school, family, and community health.**

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| **HE.7.P.8.2 :** | Articulate a position on a health-related issue and support it with accurate health information.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Advocacy - Demonstrate the ability to advocate for individual, peer, school, family, and community health.<br>Remarks/Examples<br>Bullying prevention, Internet safety, and nutritional choices. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10 |

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| | Belongs to: Craft and Structure |

## MACC.6.RP.1 Understand ratio concepts and use ratio reasoning to solve problems.

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| **MACC.6.RP.1.1 :** | Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."*<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Understand ratio concepts and use ratio reasoning to solve problems. |

## PE.6.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.

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| **PE.6.C.2.11 :** | Prepare a log noting the food intake, calories consumed and energy expended through physical activity and describe results.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.12 :** | List the components of skill-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The components of skill-related fitness are speed, coordination, balance, power, agility and reaction time. |
| **PE.6.C.2.13 :** | List appropriate warm-up and cool-down techniques and the reasons for using them.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.21 :** | Identify the precautions to be taken when exercising in extreme weather and/or environmental conditions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical |

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| | principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.22 :** | List the three different types of heat illnesses associated with fluid loss.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The three types of heat illnesses are heat cramps, heat exhaustion and heat stroke. |
| **PE.6.C.2.3 :** | Describe how each of the health-related components of fitness are improved through the application of training principles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.6.C.2.4 :** | Describe the long-term benefits of regular physical activity.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples of types of long-term benefits are physical, cognitive and emotional. |
| **PE.6.C.2.7 :** | Determine personal target heart-rate zone and explain how to adjust intensity level to stay within the desired range.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |

**PE.6.L.3 Participate regularly in physical activity.**

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| **PE.6.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.3 :** | Participate in a variety of fitness, wellness, gymnastics and dance activities that promote the components of health-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.6.L.3.4 :** | Identify the in-school opportunities for physical activity that promote fitness, wellness, gymnastics and dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.5 :** | Identify the community opportunities for physical activity that promote fitness, wellness, gymnastics and dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.6 :** | Identify a variety of fitness, wellness, gymnastics and dance activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.6.L.4 Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness.**

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| **PE.6.L.4.1 :** | Create, implement and assess a personal fitness program in collaboration with a teacher.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.6.L.4.2 :** | Develop goals and strategies for a personal physical fitness program.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

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| **PE.6.L.4.3 :** | Use available technology to assess, design and evaluate a personal physical-activity plan.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |
| **PE.6.L.4.4 :** | Develop a personal fitness program including a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

## PE.6.M.1 Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance).

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| **PE.6.M.1.1 :** | Demonstrate movements designed to improve and maintain cardiorespiratory endurance, muscular strength and endurance, flexibility, and proper body composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.11 :** | Apply proper warm-up and cool-down techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.12 :** | Use proper safety practices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance).<br>Remarks/Examples<br>Some examples of safety practices would be the use of sun screen, hydration, selection of clothing, and correct biomechanics. |
| **PE.6.M.1.13 :** | Use technology to assess, enhance, and maintain motor skill performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |

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| **PE.6.M.1.2 :** | Perform at least three different activities that achieve target heart rate.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.3 :** | Demonstrate the principles of training (overload, specificity, progression) and conditioning (frequency, intensity, time, and type) for specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.4 :** | Perform at least three activities having value for cardiorespiratory fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.5 :** | Perform movements using a variety of equipment which lead to improved or maintained muscular strength and endurance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.6 :** | Design and perform smooth, flowing sequences of stunts, tumbling, and rhythmic patterns that combine traveling, rolling, balancing, and transfer of weight.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.7 :** | Design and perform a routine to rhythm with a partner or a group while incorporating gymnastic actions and various forms of locomotion on small and/or large apparatus.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |
| **PE.6.M.1.9 :** | Create and perform a rhythmic movement sequence while working with a partner or group.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few |

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| | movement forms from a variety of categories (Fitness/Wellness, Educational Gymnastics/Educational Dance). |

**PE.6.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.6.R.6.1 :** | Identify an opportunity for participation in a physical activity outside of the school setting that contributes to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.6.R.6.2 :** | Identify the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits of participation are physical, mental, emotional and social. |
| **PE.6.R.6.3 :** | Participate in games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

**PE.7.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.7.C.2.1 :** | Identify the basic rules for team sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are setting up to start, violating rules and keeping accurate score. |
| **PE.7.C.2.3 :** | Explain basic offensive and defensive strategies in modified games |

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| | or activities and team sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.6 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.8 :** | List specific safety procedures and equipment necessary for a variety of sport skills and physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.9 :** | Describe how movement skills learned in one physical activity can be transferred and used in other physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>An example is slow-pitch softball and volleyball underhand serve. |

**PE.7.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.7.M.1.1 :** | Participate in modified versions of team sports demonstrating mature patterns while using a variety of manipulative skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of manipulative skills are throwing, catching, kicking, punting, trapping, dribbling, volleying and striking. |
| **PE.7.M.1.2 :** | Use basic offensive and defensive strategies while playing modified versions of a variety of sports and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13 |

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| | Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>An example of a modified version of a sport or activity is a small sided game. |
| **PE.7.M.1.4 :** | Demonstrate introductory outdoor pursuits skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of outdoor pursuits are archery, backpacking, orienteering, hiking, canoeing, fishing and ropes courses. |
| **PE.7.M.1.7 :** | Utilize proper equipment and implement appropriate safety procedures for participation in a variety of sports or activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.7.M.1.8 :** | Apply technology to evaluate, monitor and improve individual skill performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of technology are Excel spreadsheets or web based programs to chart or log activities, heart rate monitors, videotapes and digital cameras. |

**PE.7.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.7.R.5.1 :** | Identify situations in which peer pressure could negatively impact one's own behavior choices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse backgrounds and abilities in physical-activity settings.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13 |

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| | Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |

# Course: M/J Adaptive Physical Education IEP or 504 Plan (MC)- 1500000

## BASIC INFORMATION

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| **Course Title:** | M/J Adaptive Physical Education IEP or 504 Plan (MC) |
| **Course Number:** | 1500000 |
| **Course Abbreviated Title:** | M/J ADAP PE IEP/504 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** Adaptive |
| **Course length:** | Year (Y) |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Content for students enrolled in this course should be based upon each individual student's IEP or 504 Plan. |

STANDARDS (28)

**LACC.6.RI.3 Integration of Knowledge and Ideas**

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| **LACC.6.RI.3.7 :** | Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Integration of Knowledge and Ideas |

**PE.6.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.6.C.2.13 :** | List appropriate warm-up and cool-down techniques and the reasons for using them.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement |

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| | performance in a variety of physical activities. |
| **PE.6.C.2.14 :** | List terminology and etiquette in educational gymnastics or dance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.6.C.2.2 :** | List safety procedures that should be followed when engaging in activities to improve the health-related components of fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.6.C.2.6 :** | Classify activities as aerobic or anaerobic.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |

**PE.6.L.3 Participate regularly in physical activity.**

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| **PE.6.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.6.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.6.L.4 Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness.**

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| **PE.6.L.4.4 :** | Develop a personal fitness program including a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

**PE.6.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.6.M.1.10 :** | Design and perform different group dance and rhythm sequences that incorporate equipment.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.11 :** | Apply proper warm-up and cool-down techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.12 :** | Use proper safety practices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of safety practices are the use of sun screen, hydration, selection of clothing and correct biomechanics. |
| **PE.6.M.1.4 :** | Perform at least three activities having value for cardiorespiratory fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.5 :** | Perform movements using a variety of equipment which lead to improved or maintained muscular strength and endurance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.6.M.1.9 :** | Create and perform a rhythmic movement sequence while working with a partner or group.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

## PE.6.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.

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| **PE.6.R.5.1 :** | List ways that peer pressure can be positive and negative.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse backgrounds and abilities in physical-activity settings. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.6.R.5.4 :** | Describe the personal, social and ethical behaviors that apply to specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.6.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.6.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.6.R.6.3 :** | Participate in games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

**PE.7.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.7.C.2.1 :** | Identify the basic rules for team sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples |

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| | Some examples are setting up to start, violating rules and keeping accurate score. |
| **PE.7.C.2.2 :** | Identify the basic rules for outdoor pursuits/aquatics.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are setting up to start, violating rules and keeping accurate score. |

**PE.7.L.3 Participate regularly in physical activity.**

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| **PE.7.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.7.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.7.M.1.1 :** | Participate in modified versions of team sports demonstrating mature patterns while using a variety of manipulative skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of manipulative skills are throwing, catching, kicking, punting, trapping, dribbling, volleying and striking. |
| **PE.7.M.1.7 :** | Utilize proper equipment and implement appropriate safety procedures for participation in a variety of sports or activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

**PE.7.R.5 Exhibit responsible personal and social behavior that respects self and others in**

**physical-activity settings.**

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| **PE.7.R.5.1 :** | Identify situations in which peer pressure could negatively impact one's own behavior choices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.7.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.7.R.6.2 :** | Discuss the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits are physical, mental, emotional and social. |

# Course: M/J Team Sports - Grade 7- 1508200

## BASIC INFORMATION

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| **Course Title:** | M/J Team Sports - Grade 7 |
| **Course Number:** | 1508200 |
| **Course Abbreviated Title:** | M/J Team - 7 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This course is designed for 7th grade students and is intended to be 18 weeks in length. The purpose of this course is to develop the physical skills necessary to be competent in many forms of movement, knowledge of team sports concepts such as offensive and defensive strategies and tactics, and appropriate social behaviors within a team or group setting. The integration of fitness concepts throughout the content is critical to the success of this course. |
| **General Notes:** | **Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing |

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| | opportunities (claims and evidence). |

STANDARDS (30)

**HE.7.C.2 Internal and External Influence - Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.**

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| **HE.7.C.2.6 :** | Evaluate the influence of technology in locating valid health information.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Internal and External Influence - Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.<br>Remarks/Examples<br>Specific health sites to acquire valid health information: CDC, NIH, NIDA, and local health organizations; and Internet and cell phone apps. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**MACC.7.SP.3 Investigate chance processes and develop, use, and evaluate probability models.**

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| **MACC.7.SP.3.5 :** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.<br>Cognitive Complexity: Level 1: Recall l Date Adopted or Revised: 12/10<br>Belongs to: Investigate chance processes and develop, use, and evaluate probability models. |

**PE.7.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of**

**physical activities.**

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| **PE.7.C.2.1 :** | Identify the basic rules for team sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are setting up to start, violating rules and keeping accurate score. |
| **PE.7.C.2.3 :** | Explain basic offensive and defensive strategies in modified games or activities and team sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.6 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.7 :** | Identify the critical elements for successful performance of a variety of sport skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.8 :** | List specific safety procedures and equipment necessary for a variety of sport skills and physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.9 :** | Describe how movement skills learned in one physical activity can be transferred and used in other physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples |

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| | An example is slow-pitch softball and volleyball underhand serve. |

**PE.7.L.3 Participate regularly in physical activity.**

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| **PE.7.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.3 :** | Participate in a variety of team sports, outdoor pursuits and aquatics activities that promote health-related physical fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.7.L.3.4 :** | Identify the in-school opportunities for participation in team sports, outdoor pursuits and aquatics activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.5 :** | Identify the community opportunities that promote team sports, outdoor pursuits and aquatics activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.6 :** | Identify a variety of team sports, outdoor pursuits and aquatics activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.7.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.7.M.1.1 :** | Participate in modified versions of team sports demonstrating mature patterns while using a variety of manipulative skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

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| | Remarks/Examples<br>Some examples of manipulative skills are throwing, catching, kicking, punting, trapping, dribbling, volleying and striking. |
| **PE.7.M.1.2 :** | Use basic offensive and defensive strategies while playing modified versions of a variety of sports and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>An example of a modified version of a sport or activity is a small sided game. |
| **PE.7.M.1.3 :** | Demonstrate appropriate relationships between the body and an opponent in dynamic game situations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples are staying between opponent and goal and moving between opponent and the ball. |
| **PE.7.M.1.6 :** | Demonstrate the critical elements in specialized skills related to a variety of team sports or outdoor pursuits activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples are overhand throw for distance/force, forearm passing in volleyball, steering a canoe, batting and the correct stance in archery. |
| **PE.7.M.1.7 :** | Utilize proper equipment and implement appropriate safety procedures for participation in a variety of sports or activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.7.M.1.8 :** | Apply technology to evaluate, monitor and improve individual skill performance. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of technology are Excel spreadsheets or web based programs to chart or log activities, heart rate monitors, videotapes and digital cameras. |
| **PE.7.M.1.9 :** | Demonstrate principles of biomechanics necessary for safe and successful performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

## PE.7.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.

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| **PE.7.R.5.1 :** | Identify situations in which peer pressure could negatively impact one's own behavior choices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse backgrounds and abilities in physical-activity settings.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.7.R.5.4 :** | List examples of appropriate personal, social and ethical behaviors that apply to specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

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| **PE.7.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

## PE.7.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

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| **PE.7.R.6.1 :** | Identify an opportunity for participation in a physical activity outside of the school setting that contributes to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.7.R.6.2 :** | Discuss the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits are physical, mental, emotional and social. |
| **PE.7.R.6.3 :** | Participate in games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

# Course: M/J Outdoor Pursuits/Aquatics - Grade 7- 1508300

## BASIC INFORMATION

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| **Course Title:** | M/J Outdoor Pursuits/Aquatics - Grade 7 |
| **Course Number:** | 1508300 |
| **Course Abbreviated Title:** | M/J Out Pur/Aqu - 7 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | This course is designed for 7th grade students and is intended to be 18 weeks in length. The purpose of this course is to provide the skills, knowledge, and motivation necessary for participation in non-traditional forms of physical activity. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a physically active lifestyle. |
| **General Notes:** | **Instructional Practices**<br><br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text. |

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| | 5. Providing extensive text-based research and writing opportunities (claims and evidence). |

STANDARDS (32)

**HE.7.C.1 Core Concepts - Comprehend concepts related to health promotion and disease prevention to enhance health.**

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| **HE.7.C.1.8 :** | Explain the likelihood of injury or illness if engaging in unhealthy/risky behaviors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: N/A<br>Belongs to: Core Concepts - Comprehend concepts related to health promotion and disease prevention to enhance health.<br>Remarks/Examples<br>Abuse of over-the-counter medications, sexually transmitted diseases and sexually transmitted infections from sexual relationships, injury, or death from unsupervised handling of firearms, and physical/emotional injury, or impact from abusive dating partner. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**MACC.7.SP.3 Investigate chance processes and develop, use, and evaluate probability models.**

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| **MACC.7.SP.3.5 :** | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.<br>Cognitive Complexity: Level 1: Recall l Date Adopted or Revised: 12/10<br>Belongs to: Investigate chance processes and develop, use, and evaluate |

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| | probability models. |

**PE.7.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.7.C.2.2 :** | Identify the basic rules for outdoor pursuits/aquatics.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are setting up to start, violating rules and keeping accurate score. |
| **PE.7.C.2.4 :** | Explain basic offensive and defensive strategies in modified games or activities and outdoor pursuits/aquatics.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.5 :** | Identify and explain different types of safety equipment and practices relating to water activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.6 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.7 :** | Identify the critical elements for successful performance of a variety of sport skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.8 :** | List specific safety procedures and equipment necessary for a variety of sport skills and physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical |

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| | principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.7.C.2.9 :** | Describe how movement skills learned in one physical activity can be transferred and used in other physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>An example is slow-pitch softball and volleyball underhand serve. |

## PE.7.L.3 Participate regularly in physical activity.

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| **PE.7.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.3 :** | Participate in a variety of team sports, outdoor pursuits and aquatics activities that promote health-related physical fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |
| **PE.7.L.3.4 :** | Identify the in-school opportunities for participation in team sports, outdoor pursuits and aquatics activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.7.L.3.5 :** | Identify the community opportunities that promote team sports, outdoor pursuits and aquatics activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

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| **PE.7.L.3.6 :** | Identify a variety of team sports, outdoor pursuits and aquatics activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.7.M.1 Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.**

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| **PE.7.M.1.2 :** | Use basic offensive and defensive strategies while playing modified versions of a variety of sports and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>An example of a modified version of a sport or activity is a small sided game. |
| **PE.7.M.1.3 :** | Demonstrate appropriate relationships between the body and an opponent in dynamic game situations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples are staying between opponent and goal and moving between opponent and the ball. |
| **PE.7.M.1.4 :** | Demonstrate introductory outdoor pursuits skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of outdoor pursuits are archery, backpacking, orienteering, hiking, canoeing, fishing and ropes courses. |
| **PE.7.M.1.5 :** | Perform aquatics activities to improve or maintain health-related fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples<br>Some examples of aquatic activities are water aerobics, water |

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| | polo and survival swimming. |
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| **PE.7.M.1.6 :** | Demonstrate the critical elements in specialized skills related to a variety of team sports or outdoor pursuits activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples |
| | Some examples are overhand throw for distance/force, forearm passing in volleyball, steering a canoe, batting and the correct stance in archery. |
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| **PE.7.M.1.7 :** | Utilize proper equipment and implement appropriate safety procedures for participation in a variety of sports or activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |
| **PE.7.M.1.8 :** | Apply technology to evaluate, monitor and improve individual skill performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories.<br>Remarks/Examples |
| | Some examples of technology are Excel spreadsheets or web based programs to chart or log activities, heart rate monitors, videotapes and digital cameras. |
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| **PE.7.M.1.9 :** | Demonstrate principles of biomechanics necessary for safe and successful performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Demonstrate competency in many, and proficiency in a few, movement forms from a variety of categories. |

**PE.7.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.7.R.5.1 :** | Identify situations in which peer pressure could negatively impact one's own behavior choices.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

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| **PE.7.R.5.2 :** | Demonstrate acceptance and respect for persons of diverse backgrounds and abilities in physical-activity settings.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.3 :** | Demonstrate responsible behaviors during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples of responsible behaviors are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.7.R.5.4 :** | List examples of appropriate personal, social and ethical behaviors that apply to specific physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.7.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.7.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.**

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| **PE.7.R.6.1 :** | Identify an opportunity for participation in a physical activity outside of the school setting that contributes to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.7.R.6.2 :** | Discuss the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples |

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| | Some examples of potential benefits are physical, mental, emotional and social. |
| **PE.7.R.6.3 :** | Participate in games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

# Course: M/J Individual/Dual Sports - Grade 8-1508500

## BASIC INFORMATION

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| **Course Title:** | M/J Individual/Dual Sports - Grade 8 |
| **Course Number:** | 1508500 |
| **Course Abbreviated Title:** | M/J Ind/Dual - 8 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Physical Education **SubSubject:** General |
| **Course length:** | Semester (S) |
| **Course Type:** | Elective |
| **Status:** | Draft - Board Approval Pending |

STANDARDS (33)

**HE.8.C.2 Internal and External Influence - Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.**

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| **HE.8.C.2.9 :** | Analyze the influence of personal values, attitudes, and beliefs about individual health practices and behaviors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Internal and External Influence - Analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.<br>Remarks/Examples<br>Social conformity, desires, and impulses. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date |

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| | Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**MACC.8.SP.1 Investigate patterns of association in bivariate data.**

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| **MACC.8.SP.1.4 :** | Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. *For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?*<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Investigate patterns of association in bivariate data. |

**PE.8.C.2 Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.**

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| **PE.8.C.2.1 :** | Identify basic rules for individual/dual sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are setting up to start, violating rules and keeping accurate score. |
| **PE.8.C.2.3 :** | Explain basic offensive and defensive strategies in individual/dual sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.5 :** | Provide feedback on skill patterns of self and partner by detecting and correcting mechanical errors.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement |

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| | performance in a variety of physical activities. |
| **PE.8.C.2.6 :** | Identify the critical elements for successful performance in a variety of sport skills or physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.7 :** | List specific safety procedures and equipment necessary for a variety of sport skills and physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities. |
| **PE.8.C.2.8 :** | Describe how movement skills and strategies learned in one physical activity can be transferred and used in other physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Identify, analyze and evaluate movement concepts, mechanical principles, safety considerations and strategies/tactics regarding movement performance in a variety of physical activities.<br>Remarks/Examples<br>Some examples are volleyball and tennis serve and surfing and skate boarding. |

## PE.8.L.3 Participate regularly in physical activity.

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| **PE.8.L.3.1 :** | Participate in moderate physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.2 :** | Participate in vigorous physical activity on a daily basis.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.3 :** | Participate in a variety of individual/dual and alternative/extreme sport activities that promote health-related components of fitness.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity.<br>Remarks/Examples<br>The health-related components of fitness are cardiorespiratory endurance, muscular strength, muscular endurance, flexibility and body composition. |

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| **PE.8.L.3.4 :** | Identify the in-school opportunities for participation in individual/dual and alternative/extreme sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.5 :** | Identify the community opportunities for participation in individual/dual and alternative/extreme sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |
| **PE.8.L.3.6 :** | Identify a variety of individual/dual and alternative/extreme sport activities that promote stress management.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Participate regularly in physical activity. |

**PE.8.L.4 Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness.**

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| **PE.8.L.4.3 :** | Use available technology to assess, design and evaluate a personal physical fitness program.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Develop and implement a personal fitness program to achieve and maintain a health-enhancing level of physical fitness. |

**PE.8.M.1 Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports).**

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| **PE.8.M.1.1 :** | Demonstrate competency in motor skills for a variety of individual/dual and extreme/alternative sports.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |
| **PE.8.M.1.2 :** | Demonstrate critical elements when striking with an object or implement.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |
| **PE.8.M.1.3 :** | Demonstrate body management for successful participation in a variety of modified games and activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports. |

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| | Alternative/Extreme Sports).<br>Remarks/Examples<br>Some examples of body management would be balance and agility. |
| **PE.8.M.1.4 :** | Apply principles of biomechanics necessary for safe and successful performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |
| **PE.8.M.1.5 :** | Demonstrate appropriate speed and generation of force when running sprints or distance, throwing, jumping, striking, or kicking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |
| **PE.8.M.1.6 :** | Demonstrate offensive, defensive, and transition strategies and tactics.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |
| **PE.8.M.1.7 :** | Apply skill-related components of balance, reaction time, agility, coordination, power, and speed to enhance performance levels.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |
| **PE.8.M.1.8 :** | Apply technology to evaluate, monitor, and improve individual motor skills.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports).<br>Remarks/Examples<br>An example is exer-gaming. |
| **PE.8.M.1.9 :** | Select and utilize appropriate safety equipment.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/08<br>Belongs to: Demonstrate competency in many and proficiency in a few |

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| | movement forms from a variety of categories (Individual/Dual Sports, Alternative/Extreme Sports). |

**PE.8.R.5 Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.**

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| **PE.8.R.5.1 :** | List ways to act independently of peer pressure during physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.8.R.5.2 :** | Develop strategies for including persons of diverse backgrounds and abilities while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |
| **PE.8.R.5.3 :** | Demonstrate sportsmanship during game situations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples are controlling emotions, resolving conflicts, respecting opponents and officials and accepting both victory and defeat. |
| **PE.8.R.5.4 :** | Maintain appropriate personal, social and ethical behavior while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings.<br>Remarks/Examples<br>Some examples are respecting teammates, opponents and officials and accepting both victory and defeat. |
| **PE.8.R.5.5 :** | Demonstrate appropriate etiquette, care of equipment, respect for facilities and safe behaviors while participating in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Exhibit responsible personal and social behavior that respects self and others in physical-activity settings. |

**PE.8.R.6 Value physical activity for health, enjoyment, challenge, self-expression, and/or**

**social interaction.**

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| **PE.8.R.6.1 :** | Discuss opportunities for participation in a variety of physical activities outside of the school setting that contribute to personal enjoyment and the attainment or maintenance of a healthy lifestyle.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |
| **PE.8.R.6.2 :** | Describe the potential benefits of participation in a variety of physical activities.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.<br>Remarks/Examples<br>Some examples of potential benefits are physical, mental, emotional and social. |
| **PE.8.R.6.3 :** | Compare and contrast games, sports and/or physical activities from other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 04/13<br>Belongs to: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction. |

# Course: M/J Peer Counseling 2- 1400010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3832.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Peer Counseling 2 |
| **Course Number:** | 1400010 |
| **Course Abbreviated Title:** | M/J Peer Counseling 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Peer Counseling **SubSubject:** General |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | The purpose of this course is to enable students to further develop awareness of self and others. Emphasis will be on acquisition of intermediate level skills for thoughtful planning, peer facilitation, effective communication and making healthy choices.<br><br>The content should include, but not be limited to, the following:<br><br>• Peer Facilitating<br>• Behavioral Dynamics<br>• Human Needs<br>• Group Dynamics<br>• Leadership Skills<br>• Intra/Interpersonal Skills<br>• Peer and Family Relationships<br>• Conflict Resolution<br>• School/Community Resources<br>• Mediation<br>• Effective Communication<br>• Problem Solving |

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| | **Special Notes:**<br><br>**Instructional Practices**<br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

## STANDARDS (35)

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| **HE.6.B.3.1:** | Examine the validity of health information, and determine the cost of health products, and services.<br>Remarks/Examples |
| | Advertisements, Internet, infomercials, articles, flyers, diet supplements, generic vs. name brand, individual fitness plan vs. gym membership, and private lessons vs. recreational play. |
| | |
| **HE.6.B.4.1:** | Determine strategies to improve effective verbal- and nonverbal-communication skills to enhance health.<br>Remarks/Examples |
| | Role playing, short stories, and open-ended scenarios. |
| | |
| **HE.6.B.4.2:** | Practice refusal skills and negotiation skills to reduce health risks. |

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| | Remarks/Examples |
| | Assertiveness, compromising, and use of "I" messages. |
| | |
| **HE.6.B.4.3:** | Demonstrate effective conflict-management and/or resolution strategies.<br>Remarks/Examples |
| | Talk to an adult, anger management, and conflict mediation. |
| | |
| **HE.6.B.5.1:** | Investigate health-related situations that require the application of a thoughtful decision-making process.<br>Remarks/Examples |
| | Peer pressure, exposure to unsupervised firearms, and tobacco use. |
| | |
| **HE.6.B.5.2:** | Choose healthy alternatives over unhealthy alternatives when making a decision.<br>Remarks/Examples |
| | Not smoking, limiting sedentary activity, and practicing good character. |
| | |
| **HE.6.B.5.3:** | Specify the potential outcomes of each option when making a health-related decision.<br>Remarks/Examples |
| | Physical, social, emotional, financial, and legal consequences, and emergency preparedness. |
| | |
| **HE.6.B.6.2:** | Develop an individual goal to adopt, maintain, or improve a personal health practice.<br>Remarks/Examples |
| | Physical activity, eating habits, safety habits, computer use/safety, bullying-prevention skills, and personal hygiene. |
| | |
| **HE.6.C.1.2:** | Describe how the physical, mental/emotional, social, and intellectual dimensions of health are interrelated.<br>Remarks/Examples |
| | Nutrition/mental alertness, interpersonal conflicts/emotional stress, sleep/physical stamina, and hunger/solving problems. |
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| **HE.6.C.2.2:** | Examine how peers influence the health of adolescents.<br>Remarks/Examples |
| | Conflict resolution skills, reproductive-health misinformation, and spreading rumors. |
| | |
| **HE.6.C.2.3:** | Identify the impact of health information conveyed to students by the school and community.<br>Remarks/Examples |
| | First-aid education program, refusal-skills practice, and healthy body composition: BMI. |
| | |
| **HE.6.C.2.6:** | Propose ways that technology can influence peer and community health behaviors.<br>Remarks/Examples |
| | Internet social media/networking sites, heart-rate monitors, and cross-walk signals. |
| | |
| **HE.6.C.2.9:** | Identify the influence of personal values, attitudes, and beliefs about individual health practices and behaviors.<br>Remarks/Examples |
| | Curiosity, interests, fears, likes, and dislikes. |
| | |
| **HE.6.P.7.1:** | Explain the importance of assuming responsibility for personal-health behaviors.<br>Remarks/Examples |
| | Medical/dental checkups, resisting peer pressure, and healthy relationships. |
| | |
| **HE.6.P.8.1:** | Practice how to influence and support others when making positive health choices.<br>Remarks/Examples |
| | Encourage others to read food labels, promote physical activity, encourage practice of universal precautions, and leading by example. |
| | |
| **HE.6.P.8.3:** | Work cooperatively to advocate for healthy individuals, families, and schools.<br>Remarks/Examples |

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| | Media campaigns, posters, skits, and PSAs. |
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| **HE.7.B.3.1:** | Analyze the validity of health information, products, and services.<br>Remarks/Examples |
| | Advertisements, health-claim articles, personal-care product claims, and tobacco-use information, internet searches, store visits, newspaper use, phonebook search, and personal call to sources for information. |
| | |
| **HE.7.B.4.1:** | Apply effective communication skills when interacting with others to enhance health.<br>Remarks/Examples |
| | Clear and concise words, nonverbal language, discussion, "I" messages, and assertive vs. passive or aggressive communication. |
| | |
| **HE.7.B.4.2:** | Demonstrate refusal, negotiation, and collaboration skills to enhance health and reduce health risks.<br>Remarks/Examples |
| | Working together, compromise, direct statement, peer mediation, personal boundaries, and reflective listening. |
| | |
| **HE.7.B.4.4:** | Demonstrate how to ask for assistance to enhance the health of self and others.<br>Remarks/Examples |
| | “I” messages, ask on behalf of a friend, written request, riding in a vehicle with someone who is intoxicated, and bullying. |
| | |
| **HE.7.B.5.2:** | Select healthy alternatives over unhealthy alternatives when making a decision.<br>Remarks/Examples |
| | Proper prescription-drug use, using safety equipment, Internet safety, and managing stress. |
| | |
| **HE.7.C.2.9:** | Explain the influence of personal values, attitudes, and beliefs about individual health practices and behaviors.<br>Remarks/Examples |
| | Social conformity, social status/appearance, experimentation with |

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| | drugs, food relationships, and spirituality. |
| | |
| **HE.7.P.7.1:** | Examine the importance of assuming responsibility for personal-health behaviors.<br>Remarks/Examples |
| | Physical activity, eating habits, stress management, quality of life, sexual behaviors, and adequate sleep. |
| | |
| **HE.7.P.8.3:** | Work cooperatively to advocate for healthy individuals, peers, and families.<br>Remarks/Examples |
| | Assist with or conduct needs assessments, write advocacy letters, and volunteer at information kiosks. |
| | |
| **(Florida: HE.8.B.5.2) (adopted 5/2013):** | Categorize healthy and unhealthy alternatives to health-related issues or problems.<br>Remarks/Examples |
| | (Alcohol consumption, sleep requirements, physical activity, and time management.) |
| | |
| **HE.8.B.3.2:** | Analyze the accessibility, validity, and reliability of products and services that enhance home, school, and community health.<br>Remarks/Examples |
| | Reliability of advertisements, articles, infomercials, and web-based products; health department; community agencies; and prescribed medications vs. over-the-counter. |
| | |
| **HE.8.C.2.3:** | Analyze how the school and community may influence adolescent health.<br>Remarks/Examples |
| | Drug-abuse education programs, volunteering opportunities, and availability of recreational facilities/programs. |
| | |
| **HE.8.C.2.8:** | Explain how the perceptions of norms influence healthy and unhealthy behaviors.<br>Remarks/Examples |
| | Sexual abstinence, prescription-drug use, marijuana use, and perception that certain abusive-relationship behaviors are “normal.” |

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| **HE.8.P.8.3:** | Work cooperatively to advocate for healthy individuals, peers, families, and schools.<br>Remarks/Examples |
| | Promote community initiatives; create media campaigns, peer-led prevention campaigns, and school wellness councils. |
| | |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.68.WHST.3.8:** | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| **LACC.7.RI.1.3:** | Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events). |
| **LACC.7.RI.3.8:** | Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims. |
| **LACC.7.SL.1.1:** | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and, when warranted, modify their own views. |

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| **LACC.7.SL.2.5:** | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |

# Course: M/J Peer Counseling 1- 1400000

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3830.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Peer Counseling 1 |
| **Course Number:** | 1400000 |
| **Course Abbreviated Title:** | M/J PEER COUN 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Peer Counseling **SubSubject:** General |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **General Notes:** | The purpose of this course is to enable students to develop awareness of self and others. Emphasis will be on acquisition of basic skills for thoughtful planning, peer facilitation, effective communication and making healthy choices.<br><br>The content should include, but not be limited to, the following:<br><br>• Peer Facilitating<br>• Human Needs<br>• Self Awareness and Expression<br>• Peer Pressure<br>• Peer and Family Relationships<br>• Conflict Resolution<br>• Goal Setting<br>• Social Skills<br>• Active Listening<br>• Personal Choices<br>• Healthy Lifestyles<br>• Effects of Stress |

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| | **Special Notes:**<br><br>**Instructional Practices**<br>Teaching from a well-written, grade-level textbook enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. Using the following instructional practices also helps student learning:<br><br>1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.<br>2. Making close reading and rereading of texts central to lessons.<br>3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.<br>4. Requiring students to support answers with evidence from the text.<br>5. Providing extensive text-based research and writing opportunities (claims and evidence). |

## STANDARDS (18)

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| **HE.6.B.4.1:** | Determine strategies to improve effective verbal- and nonverbal-communication skills to enhance health.<br>Remarks/Examples |
| | Role playing, short stories, and open-ended scenarios. |
| | |
| **HE.6.B.4.2:** | Practice refusal skills and negotiation skills to reduce health risks.<br>Remarks/Examples |
| | Assertiveness, compromising, and use of "I" messages. |
| | |
| **HE.6.B.5.1:** | Investigate health-related situations that require the application of a thoughtful decision-making process.<br>Remarks/Examples |
| | Peer pressure, exposure to unsupervised firearms, and tobacco use. |
| | |

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| **HE.6.B.5.2:** | Choose healthy alternatives over unhealthy alternatives when making a decision.<br>Remarks/Examples<br>Not smoking, limiting sedentary activity, and practicing good character. |
| **HE.6.C.2.8:** | Determine how social norms may impact healthy and unhealthy behavior.<br>Remarks/Examples<br>Alcohol, tobacco and inhalant-use, bullying behaviors, and walking/biking vs. riding in a vehicle to a close location. |
| **HE.6.P.8.4:** | Identify ways health messages and communication techniques can be targeted for different audiences.<br>Remarks/Examples<br>Surveys, advertisements, music, and clothing. |
| **HE.7.B.4.1:** | Apply effective communication skills when interacting with others to enhance health.<br>Remarks/Examples<br>Clear and concise words, nonverbal language, discussion, "I" messages, and assertive vs. passive or aggressive communication. |
| **HE.7.B.4.2:** | Demonstrate refusal, negotiation, and collaboration skills to enhance health and reduce health risks.<br>Remarks/Examples<br>Working together, compromise, direct statement, peer mediation, personal boundaries, and reflective listening. |
| **HE.7.B.4.3:** | Articulate the possible causes of conflict among youth in schools and communities.<br>Remarks/Examples<br>Ethnic prejudice and diversity, substance use, group dynamics, relationship issues/dating violence, gossip/rumors, and sexual identity. |
| **HE.7.B.4.4:** | Demonstrate how to ask for assistance to enhance the health of self and others. |

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| | Remarks/Examples |
| | "I" messages, ask on behalf of a friend, written request, riding in a vehicle with someone who is intoxicated, and bullying. |
| | |
| **HE.7.B.5.2:** | Select healthy alternatives over unhealthy alternatives when making a decision.<br>Remarks/Examples |
| | Proper prescription-drug use, using safety equipment, Internet safety, and managing stress. |
| | |
| **(Florida: HE.8.B.5.2) (adopted 5/2013):** | Categorize healthy and unhealthy alternatives to health-related issues or problems.<br>Remarks/Examples |
| | (Alcohol consumption, sleep requirements, physical activity, and time management.) |
| | |
| **LACC.68.WHST.2.6:** | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently. |
| **LACC.7.RI.1.3:** | Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events). |
| **LACC.7.RI.3.8:** | Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims. |
| **LACC.7.SL.1.1:** | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.<br><br>a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.<br>b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.<br>c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas |

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| | that bring the discussion back on topic as needed.<br>d. Acknowledge new information expressed by others and, when warranted, modify their own views. |
| LACC.7.SL.2.5: | Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points. |
| LACC.7.W.3.8: | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |

# Course: M/J Music Ensemble 2- 1303210

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4168.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Music Ensemble 2 |
| **Course Number:** | 1303210 |
| **Course Abbreviated Title:** | M/J MUSIC ENS 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with previous vocal or instrumental ensemble experience continue to build musicianship and performance skills through the study, rehearsal, and performance of high-quality ensemble literature in a variety of styles. Student musicians learn to self-assess and collaborate as they study relevant musical styles and time periods. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |

## STANDARDS (29)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse |

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| | media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.7.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-**

**solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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| **MU.68.F.2.1 :** | Describe several routes a composition or performance could travel from creator to consumer.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the Internet, home studios, professional recording studios, sales |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

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| | Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields. |

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| | Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, |

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| | phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar |

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| | pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |

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| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Music Ensemble 1- 1303200

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4165.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Music Ensemble 1 |
| **Course Number:** | 1303200 |
| **Course Abbreviated Title:** | M/J MUSIC ENS 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Number of Credits:** | One credit (1) |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with little or no small vocal or instrumental ensemble experience develop musicianship and performance skills as they study, rehearse, and perform high-quality ensemble literature in diverse styles. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |

## STANDARDS (24)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.6.SL.1 Comprehension and Collaboration**

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| **LACC.6.SL.1.2 :** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.6.SL.1.3 :** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.6.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |

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| | Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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|---|---|
| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

| | |
|---|---|
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, |

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| | to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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| | Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Music Technology- 1303150

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4199.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Music Technology |
| **Course Number:** | 1303150 |
| **Course Abbreviated Title:** | M/J MUSIC TECH |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students investigate the fundamental applications, tools, history, and aesthetics of music technology. Student musicians explore traditional, current, and emerging technologies, including personal devices; and use them to explore, capture, create, arrange, manipulate, reproduce, and distribute music. Public performances may serve as a resource for specific instructional goals. Students may be expected to attend one or more performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (21)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

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| **DA.68.S.2.1:** | Sustain focused attention, respect, and discipline during classes and performances. |
| **LACC.6.SL.1.2:** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| **LACC.6.SL.1.3:** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |
| **LACC.6.SL.2.4:** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.WHST.3.7:** | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |
| **MU.68.C.2.1:** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Remarks/Examples |
| | e.g., intonation, balance, blend, phrasing, rhythm |
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| **MU.68.C.2.3:** | Critique personal composition and/or improvisation, using simple criteria, to generate improvements with guidance from teachers and/or peers. |
| **MU.68.F.1.1:** | Create a composition and/or performance, using visual, kinesthetic, digital, and/or acoustic means to manipulate musical elements. |
| **MU.68.F.1.2:** | Create an original composition that reflects various performances that use "traditional" and contemporary technologies.<br>Remarks/Examples<br>e.g., MIDI, Internet video resources, personal digital assistants, MP3 players, cell phones, digital recording, music software |
| **MU.68.F.2.1:** | Describe several routes a composition or performance could travel from creator to consumer.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the Internet, home studios, professional recording studios, sales |
| **MU.68.F.3.2:** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media. |
| **MU.68.F.3.3:** | Identify the tasks involved in the compositional process and discuss how the process might be applied in the work place.<br>Remarks/Examples<br>e.g., idea, development, editing, selling, revising, testing, presenting |
| **MU.68.H.2.2:** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.3.1:** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |

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| **MU.68.O.2.1:** | Create a composition, manipulating musical elements and exploring the effects of those manipulations.<br>Remarks/Examples<br>e.g., using electronic or paper-and-pencil means to experiment with timbre, melody, rhythm, harmony, form, tonality |
| **MU.68.O.3.1:** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.S.1.2:** | Compose a short musical piece.<br>Remarks/Examples<br>e.g., using traditional, non-traditional, digital, or classroom instruments and/or voice |
| **MU.68.S.1.3:** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing. |
| **MU.68.S.1.8:** | Demonstrate specified mixing and editing techniques using selected software and hardware. |

# Course: M/J Music Techniques 3- 1303250

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4163.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Music Techniques 3 |
| **Course Number:** | 1303250 |
| **Course Abbreviated Title:** | M/J MUSIC TECNQS 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Student musicians build on previous instruction to develop high levels of musicianship, technical proficiency, and performance skills through preparation of technically challenging scales, etudes, and solo literature. Students use problem-solving, critical thinking, and reflection to demonstrate the skills of disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental class, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |

## STANDARDS (29)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.8.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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|---|---|
| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.8.SL.1 Comprehension and Collaboration**

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| **LACC.8.SL.1.2 :** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.8.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date |

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| | Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.8.SL.2 Presentation of Knowledge and Ideas**

| | |
|---|---|
| **LACC.8.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

| | |
|---|---|
| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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|---|---|
| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples |

| | |
|---|---|
| | e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

| | |
|---|---|
| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

| | |
|---|---|
| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

| | |
|---|---|
| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

| | |
|---|---|
| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

| | |
|---|---|
| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

| | |
|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

| | |
|---|---|
| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |

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| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

| | |
|---|---|
| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

| | |
|---|---|
| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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|---|---|
| | Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Music Techniques 2- 1303240

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4159.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Music Techniques 2 |
| **Course Number:** | 1303240 |
| **Course Abbreviated Title:** | M/J MUSIC TECNQS 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Number of Credits:** | One credit (1) |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students build on previous instruction to strengthen their musicianship, technique, and performance skills through preparation of scales, etudes, and solo literature. Through problem-solving, critical thinking, and reflection, students develop the physical and cognitive skills necessary to be more disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental class, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |

## STANDARDS (26)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

| | |
|---|---|
| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

| | |
|---|---|
| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.7.SL.1 Comprehension and Collaboration**

| | |
|---|---|
| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence. |

| | |
|---|---|
| | Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.7.SL.2 Presentation of Knowledge and Ideas**

| | |
|---|---|
| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

| | |
|---|---|
| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

| | |
|---|---|
| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth. |

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|---|---|
| | Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

| | |
|---|---|
| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

| | |
|---|---|
| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

| | |
|---|---|
| | Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

| | |
|---|---|
| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

| | |
|---|---|
| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

| | |
|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |

| | |
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| | |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

| | |
|---|---|
| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

| | |
|---|---|
| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |

| | |
|---|---|
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

| | |
|---|---|
| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |

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| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Music Techniques 1- 1303230

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4158.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Music Techniques 1 |
| **Course Number:** | 1303230 |
| **Course Abbreviated Title:** | M/J MUSIC TECNQS 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Number of Credits:** | One credit (1) |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with little or no instrumental or vocal experience develop musicianship, technical proficiency, and performance skills. Beginning musicians focus on development of skills and techniques through scales, etudes, and solo literature. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental class, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |

## STANDARDS (22)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.6.SL.1 Comprehension and Collaboration**

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|---|---|
| **LACC.6.SL.1.2 :** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.6.SL.1.3 :** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.6.SL.2 Presentation of Knowledge and Ideas**

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|---|---|
| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**LACC.68.RST.2 Craft and Structure**

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|---|---|
| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |

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| | Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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|---|---|
| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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|---|---|
| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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|---|---|
| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples |

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| | e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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|---|---|
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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|---|---|
| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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|---|---|
| | Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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|---|---|
| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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|---|---|
| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |

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| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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|---|---|
| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |

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| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Music Ensemble 3- 1303220

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4174.aspx

## BASIC INFORMATION

| | |
|---|---|
| **Course Title:** | M/J Music Ensemble 3 |
| **Course Number:** | 1303220 |
| **Course Abbreviated Title:** | M/J MUSIC ENS 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Music Technology and Performance |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students continue to build musicianship and performance skills through the study, rehearsal, and performance of increasingly challenging, high-quality vocal or instrumental ensemble literature. Student musicians strengthen their techniques, ensemble skills, music literacy, and analytical skills as they study relevant history, cultures, and music genres. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |

## STANDARDS (34)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.8.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

| | |
|---|---|
| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**LACC.8.SL.1 Comprehension and Collaboration**

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| **LACC.8.SL.1.2 :** | Analyze the purpose of information presented in diverse media |

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| | and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.8.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.8.SL.2 Presentation of Knowledge and Ideas**

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|---|---|
| **LACC.8.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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|---|---|
| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-**

**solving, and decision-making skills, is central to artistic growth.**

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|---|---|
| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.C.3 The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts.**

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|---|---|
| **MU.68.C.3.1 :** | Apply specific criteria to evaluate why a musical work is an exemplar in a specific style or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts. |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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|---|---|
| **MU.68.F.2.2 :** | Describe how concert attendance can financially impact a community.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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|---|---|
| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |

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**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.1 :** | Describe the influence of historical events and periods on music composition and performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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|---|---|
| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a**

**foundation for appreciation of artistic works and respect for the creative process.**

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|---|---|
| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge |

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| | and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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|---|---|
| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple,**

**then complex, skills and techniques.**

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|---|---|
| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples |

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|---|---|
| | e.g., independently, collaboratively |
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| | phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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|---|---|
| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

| | |
|---|---|
| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence |

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| | information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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| | Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Chorus 4- 1303030

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4176.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Chorus 4 |
| **Course Number:** | 1303030 |
| **Course Abbreviated Title:** | M/J CHORUS 4 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with significant experience in a choral ensemble develop advanced knowledge of vocal techniques, music literacy, ensemble skills, and related musical knowledge through rehearsal, performance, and study of a variety of high-quality advanced choral literature. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (46)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.

MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.8.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

## LACC.8.SL.1 Comprehension and Collaboration

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| **LACC.8.SL.1.2 :** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.8.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

## LACC.8.SL.2 Presentation of Knowledge and Ideas

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| **LACC.8.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

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| **MU.68.C.1.4 :** | Identify, aurally, a variety of vocal styles and ensembles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., chant, spiritual, folk, opera, world, jazz, pop, solo, duet, trio, quartet, small ensembles, choirs |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |
| **MU.68.C.2.3 :** | Critique personal composition and/or improvisation, using simple criteria, to generate improvements with guidance from teachers and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth. |

**MU.68.C.3 The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts.**

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|---|---|
| **MU.68.C.3.1 :** | Apply specific criteria to evaluate why a musical work is an exemplar in a specific style or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts. |

**MU.68.F.1 Creating, interpreting, and responding in the arts stimulate the imagination and encourage innovation and creative risk-taking.**

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| **MU.68.F.1.1 :** | Create a composition and/or performance, using visual, kinesthetic, digital, and/or acoustic means to manipulate musical elements.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Creating, interpreting, and responding in the arts stimulate the imagination and encourage innovation and creative risk-taking. |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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|---|---|
| **MU.68.F.2.1 :** | Describe several routes a composition or performance could travel from creator to consumer.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the Internet, home studios, professional recording studios, sales |
| **MU.68.F.2.2 :** | Describe how concert attendance can financially impact a community.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |
| **MU.68.F.3.3 :** | Identify the tasks involved in the compositional process and discuss how the process might be applied in the work place.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., idea, development, editing, selling, revising, testing, presenting |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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|---|---|
| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.3 :** | Describe how American music has been influenced by other cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

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| | Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |
| **MU.68.H.1.5 :** | Using representative musical works by selected composers, classify compositional characteristics common to a specific time period and/or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.1 :** | Describe the influence of historical events and periods on music composition and performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |
| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields. |

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| | Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.1 :** | Create a composition, manipulating musical elements and exploring the effects of those manipulations.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., using electronic or paper-and-pencil means to experiment |

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| | with timbre, melody, rhythm, harmony, form, tonality |
| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples |
| | e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples |
| | e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples |

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| | e.g., blues, rock |
| **MU.68.S.1.2 :** | Compose a short musical piece.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., using traditional, non-traditional, digital, or classroom instruments and/or voice |
| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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|---|---|
| | Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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|---|---|
| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple |

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| | meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Chorus 3- 1303020

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4173.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Chorus 3 |
| **Course Number:** | 1303020 |
| **Course Abbreviated Title:** | M/J CHORUS 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with previous choral experience build intermediate-level knowledge of vocal technique, musical literacy, ensemble skills, and related musical knowledge through rehearsal, performance, and study of a variety of high-quality 2-, 3-, and 4-part choral literature. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (39)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.

MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.68.RST.2 Craft and Structure**

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|---|---|
| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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|---|---|
| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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|---|---|
| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

## LACC.7.SL.1 Comprehension and Collaboration

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|---|---|
| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

## LACC.7.SL.2 Presentation of Knowledge and Ideas

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

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**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.C.3 The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts.**

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| **MU.68.C.3.1 :** | Apply specific criteria to evaluate why a musical work is an exemplar in a specific style or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts. |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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| **MU.68.F.2.1 :** | Describe several routes a composition or performance could travel from creator to consumer.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the |

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| | Internet, home studios, professional recording studios, sales |
| **MU.68.F.2.2 :** | Describe how concert attendance can financially impact a community.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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|---|---|
| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.3 :** | Describe how American music has been influenced by other |

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| | cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.1 :** | Describe the influence of historical events and periods on music composition and performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |
| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity. |

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| | Remarks/Examples |
| | e.g., scales; key signatures; relative major/minor; parallel major/minor |
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**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |
| | Remarks/Examples |
| | e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| | |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| | Remarks/Examples |
| | e.g., blues, rock |
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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |

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| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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|---|---|
| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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| | Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Chorus 2- 1303010

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4171.aspx

## BASIC INFORMATION

| | |
|---|---|
| **Course Title:** | M/J Chorus 2 |
| **Course Number:** | 1303010 |
| **Course Abbreviated Title:** | M/J CHORUS 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students build on previous choral experience to expand vocal, technical, musical, and ensemble skills through rehearsal, performance, and study of high-quality choral literature. Singers focus on increasing knowledge of music theory, music literacy, and aesthetic response. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (33)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.

MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.6.SL.1 Comprehension and Collaboration**

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| **LACC.6.SL.1.2 :** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.6.SL.1.3 :** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.6.SL.2 Presentation of Knowledge and Ideas**

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|---|---|
| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## LACC.68.RST.2 Craft and Structure

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

## LACC.68.WHST.2 Production and Distribution of Writing

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

## LACC.68.WHST.3 Research to Build and Present Knowledge

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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|---|---|
| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, |

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| | composer notes, instrumentation, expressive elements, title |
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| **MU.68.C.1.4 :** | Identify, aurally, a variety of vocal styles and ensembles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples |
| | e.g., chant, spiritual, folk, opera, world, jazz, pop, solo, duet, trio, quartet, small ensembles, choirs |
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**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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|---|---|
| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples |
| | e.g., intonation, balance, blend, phrasing, rhythm |
| | |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples |
| | e.g., blend, balance, ensemble playing, sonority, technique, tone quality |
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**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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| **MU.68.F.2.2 :** | Describe how concert attendance can financially impact a community.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies. |

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|---|---|
| | Remarks/Examples |
| | e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |
| | |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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|---|---|
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.5 :** | Using representative musical works by selected composers, classify compositional characteristics common to a specific time period and/or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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|---|---|
| **MU.68.H.2.1 :** | Describe the influence of historical events and periods on music composition and performance.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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|---|---|
| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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|---|---|
| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or |

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| | voice |
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**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples |
| | e.g., basic themes, patterns, tonality, melody, harmony |
| | |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples |
| | e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| | |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples |
| | e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| | |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples |
| | e.g., note and rest values, key signatures, time signatures, |

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| | expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Chorus 1- 1303000

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4167.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Chorus 1 |
| **Course Number:** | 1303000 |
| **Course Abbreviated Title:** | M/J CHORUS 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with little or no choral experience develop beginning vocal technique and skills, critical and creative thinking skills, and an appreciation of music from around the world and through time. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (24)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.

MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.6.SL.1 Comprehension and Collaboration**

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| **LACC.6.SL.1.2 :** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.6.SL.1.3 :** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.6.SL.2 Presentation of Knowledge and Ideas**

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|---|---|
| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## LACC.68.RST.2 Craft and Structure

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

## LACC.68.WHST.2 Production and Distribution of Writing

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

## LACC.68.WHST.3 Research to Build and Present Knowledge

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.4 :** | Identify, aurally, a variety of vocal styles and ensembles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., chant, spiritual, folk, opera, world, jazz, pop, solo, duet, trio, quartet, small ensembles, choirs |

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**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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|---|---|
| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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|---|---|
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the**

**ability to transfer knowledge and skills to and from other fields.**

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|---|---|
| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive |

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| | elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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|---|---|
| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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| | Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |

# Course: M/J Orchestra 2 and Career Planning-1302150

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3995.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Orchestra 2 and Career Planning |
| **Course Number:** | 1302150 |
| **Course Abbreviated Title:** | M/J ORCH 2&CAR PLAN |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Instrumental Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students who have some previous orchestral experience develop instrumental technique, performance skills, music literacy, and increasing aesthetic awareness through study, rehearsal, and performance of a variety of high-quality orchestra literature. In tandem with their learning opportunities in orchestra, students investigate careers in a wide variety of fields guided by the competencies required by Florida Statute. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |
| **General Notes:** | **Special Notes:** |

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| | **Career and Education Planning** - Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize the importance of entrepreneurship skills; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.<br><br>1.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br>2.0 Develop skills to locate, evaluate, and interpret career information.<br>3.0 Identify and demonstrate processes for making short and long term goals.<br>4.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills, and the importance of entrepreneurship.<br>5.0 Understand the relationship between educational achievement and career choices/postsecondary options.<br>6.0 Identify a career cluster and related pathways through an interest assessment that match career and education goals.<br>7.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.<br>8.0 Demonstrate knowledge of technology and its application in career fields/clusters. |

## STANDARDS (24)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.

MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.6.SL.1 Comprehension and Collaboration**

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|---|---|
| **LACC.6.SL.1.2 :** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.6.SL.1.3 :** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.6.SL.2 Presentation of Knowledge and Ideas**

| | |
|---|---|
| **LACC.6.SL.2.4 :** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## LACC.68.RST.2 Craft and Structure

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|---|---|
| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

## LACC.68.WHST.3 Research to Build and Present Knowledge

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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|---|---|
| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

## MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers. |

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|---|---|
| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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|---|---|
| **MU.68.F.2.1 :** | Describe several routes a composition or performance could travel from creator to consumer.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the Internet, home studios, professional recording studios, sales |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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|---|---|
| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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|---|---|
| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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|---|---|
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period. |

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|---|---|
| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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|---|---|
| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples |
| | e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| | |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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|---|---|
| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples |
| | e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| | |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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|---|---|
| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, |

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| | tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Orchestra 3 & Career Planning-1302160

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse3999.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Orchestra 3 & Career Planning |
| **Course Number:** | 1302160 |
| **Course Abbreviated Title:** | M/J ORCH 3 & CAR PL |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Instrumental Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with previous orchestral experience demonstrate intermediate-level knowledge of instrumental techniques, musical literacy, ensemble skills, and related musical knowledge through study, rehearsal, and performance of a variety of high-quality orchestral literature. In tandem with their learning opportunities in orchestra, students investigate careers in a wide variety of fields guided by the competencies required by Florida Statute. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. |
| **General Notes:** | **Special Notes:** Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed |

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| | personalized academic and career plan for the student; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.<br><br>Listed below are the competencies that must be met to satisfy the requirements of (Section 1003.4156, Florida Statutes):<br>1.0 Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br>2.0 Develop skills to locate, evaluate, and interpret career information.<br>3.0 Identify and demonstrate processes for making short and long term goals.<br>4.0 Demonstrate employability skills such as working in a group, problem-solving and organizational skills.<br>5.0 Understand the relationship between educational achievement and career choices/postsecondary options.<br>6.0 Identify a career cluster and related pathways that match career and education goals.<br>7.0 Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.<br>8.0 Demonstrate knowledge of technology and its application in career fields/clusters. |

## STANDARDS (30)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of |

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| | the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.7.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |
| **MU.68.C.1.3 :** | Identify, aurally, instrumental styles and a variety of instrumental ensembles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., Classical, Baroque, Romantic, contemporary, jazz, pop, solo, duet, trio, quartet, small ensembles |

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**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.C.3 The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts.**

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| **MU.68.C.3.1 :** | Apply specific criteria to evaluate why a musical work is an exemplar in a specific style or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The processes of critiquing works of art lead to development of critical-thinking skills transferable to other contexts. |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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| **MU.68.F.2.1 :** | Describe several routes a composition or performance could travel from creator to consumer.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the |

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| | Internet, home studios, professional recording studios, sales |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.5 :** | Using representative musical works by selected composers, classify compositional characteristics common to a specific time period and/or genre.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples |
| | e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, |

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| | and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |

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| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |

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| | Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Chorus 3 & Career Planning-1303140

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4197.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Chorus 3 & Career Planning |
| **Course Number:** | 1303140 |
| **Course Abbreviated Title:** | M/J CHORUS 3&CAR PL |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with previous choral experience build intermediate-level knowledge of vocal technique, musical literacy, ensemble skills, and related musical knowledge through rehearsal, performance and study of a variety of 2-, 3-, and 4-part choral literature. In tandem with their learning opportunities in chorus, students investigate careers in a wide variety of fields guided by the competencies required by Florida Statute. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |
| **General Notes:** | **Special Notes:** Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide |

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| | information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.<br><br>1. Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br>2. Develop skills to locate, evaluate, and interpret career information<br>3. Identify and demonstrate processes for making short and long term goals.<br>4. Demonstrate employability skills such as working in a group, problem-solving and organizational skills.<br>5. Understand the relationship between educational achievement and career choices/postsecondary options.<br>6. Identify a career cluster and related pathways that match career and education goals.<br>7. Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.<br>8. Demonstrate knowledge of technology and its application in career fields/clusters. |

## STANDARDS (29)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on

others' ideas and expressing their own clearly.

**DA.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **DA.68.S.2.1 :** | Sustain focused attention, respect, and discipline during classes and performances.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10 |

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| | Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.7.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.4 :** | Identify, aurally, a variety of vocal styles and ensembles.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., chant, spiritual, folk, opera, world, jazz, pop, solo, duet, trio, quartet, small ensembles, choirs |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from |

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| | teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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| **MU.68.F.2.2 :** | Describe how concert attendance can financially impact a community.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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|---|---|
| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples |

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| | e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Chorus 2 and Career Planning-1303130

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4194.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Chorus 2 and Career Planning |
| **Course Number:** | 1303130 |
| **Course Abbreviated Title:** | M/J CHORUS 2&CAR PLA |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students build on previous choral experience to expand vocal, technical, musical and ensemble skills through rehearsal, performance, and study of high-quality choral literature. Singers focus on increasing knowledge of music theory, music literacy, and aesthetic response. In tandem with their learning opportunities in chorus, students investigate careers in a wide variety of fields guided by the competencies required by Florida Statute. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |
| **General Notes:** | **Special Notes:** Per section 1003.4156, Florida Statutes, the Career and Education Planning course must result in a completed personalized academic and career plan for the student; must emphasize technology or the application of technology in career fields; and, beginning in the 2014-2015 academic year, must provide |

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| | information from the Department of Economic Opportunity's economic security report as described in section 445.07, Florida Statutes. For additional information on the Middle School Career and Education Planning course, go to http://www.fldoe.org/workforce/ced/.<br><br>1. Describe the influences that societal, economic, and technological changes have on employment trends and future training.<br>2. Develop skills to locate, evaluate, and interpret career information.<br>3. Identify and demonstrate processes for making short and long term goals.<br>4. Demonstrate employability skills such as working in a group, problem-solving and organizational skills.<br>5. Understand the relationship between educational achievement and career choices/postsecondary options.<br>6. Identify a career cluster and related pathways that match career and education goals.<br>7. Develop a career and education plan that includes short and long-term goals, high school program of study, and postsecondary/career goals.<br>8. Demonstrate knowledge of technology and its application in career fields/clusters. |

## STANDARDS (26)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on

others' ideas and expressing their own clearly.

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| DA.68.S.2.1: | Sustain focused attention, respect, and discipline during classes and performances. |
| LACC.6.SL.1.2: | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| LACC.6.SL.1.3: | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |
| LACC.6.SL.2.4: | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| LACC.68.RST.2.4: | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| LACC.68.WHST.2.4: | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| LACC.68.WHST.3.9: | Draw evidence from informational texts to support analysis reflection, and research. |
| MU.68.C.1.1: | Develop strategies for listening to unfamiliar musical works.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| MU.68.C.1.4: | Identify, aurally, a variety of vocal styles and ensembles.<br>Remarks/Examples<br>e.g., chant, spiritual, folk, opera, world, jazz, pop, solo, duet, trio, quartet, small ensembles, choirs |

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| **MU.68.C.2.1:** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2:** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |
| **MU.68.F.2.2:** | Describe how concert attendance can financially impact a community.<br>Remarks/Examples<br>e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |
| **MU.68.F.3.2:** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media. |
| **MU.68.H.1.5:** | Using representative musical works by selected composers, classify compositional characteristics common to a specific time period and/or genre. |
| **MU.68.H.2.3:** | Classify the literature being studied by genre, style, and/or time period. |
| **MU.68.H.3.1:** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.O.1.1:** | Compare performances of a musical work to identify artistic choices made by performers.<br>Remarks/Examples |

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| | e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |
| **MU.68.O.3.1:** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2:** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works. |
| **MU.68.S.1.3:** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing. |
| **MU.68.S.1.4:** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |
| **MU.68.S.3.1:** | Sing and/or play age-appropriate repertoire expressively.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2:** | Demonstrate proper vocal or instrumental technique.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3:** | Sight-read standard exercises and simple repertoire.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |

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| **MU.68.S.3.4:** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Remarks/Examples |
| | e.g., error detection, interval reinforcement |
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| **MU.68.S.3.5:** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else. |

# Course: M/J Vocal Ensemble 3- 1303120

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4192.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Vocal Ensemble 3 |
| **Course Number:** | 1303120 |
| **Course Abbreviated Title:** | M/J VOCAL ENS 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students continue to build musicianship and performance skills through the study, rehearsal, and performance of increasingly challenging, high-quality vocal ensemble literature. Student musicians strengthen their techniques, ensemble skills, music literacy, and analytical skills as they study relevant history, cultures, and music genres. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (34)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.8.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

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| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |
| **LACC.8.SL.1.2:** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation. |
| **LACC.8.SL.1.3:** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced. |
| **LACC.8.SL.2.4:** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **MU.68.C.1.1:** | Develop strategies for listening to unfamiliar musical works.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2:** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

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| MU.68.C.2.1: | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| MU.68.C.2.2: | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |
| MU.68.C.3.1: | Apply specific criteria to evaluate why a musical work is an exemplar in a specific style or genre. |
| MU.68.F.2.2: | Describe how concert attendance can financially impact a community.<br>Remarks/Examples<br>e.g., increased revenues at restaurants, hotels, and travel agencies; venue maintenance, parking attendants |
| MU.68.F.3.1: | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |
| MU.68.F.3.2: | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media. |
| MU.68.H.1.1: | Describe the functions of music from various cultures and time periods. |
| MU.68.H.1.2: | Identify the works of representative composers within a specific style or time period. |
| MU.68.H.1.4: | Classify authentic stylistic features in music originating from various |

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| | cultures.<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |
| **MU.68.H.2.1:** | Describe the influence of historical events and periods on music composition and performance. |
| **MU.68.H.2.3:** | Classify the literature being studied by genre, style, and/or time period. |
| **MU.68.H.3.1:** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2:** | Discuss how the absence of music would affect other content areas and contexts.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |
| **MU.68.O.1.1:** | Compare performances of a musical work to identify artistic choices made by performers.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |
| **MU.68.O.2.2:** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

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| **MU.68.O.3.1:** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2:** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works. |
| **MU.68.S.1.3:** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing. |
| **MU.68.S.1.4:** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |
| **MU.68.S.2.1:** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2:** | Transfer performance techniques from familiar to unfamiliar pieces. |
| **MU.68.S.3.1:** | Sing and/or play age-appropriate repertoire expressively.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2:** | Demonstrate proper vocal or instrumental technique.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3:** | Sight-read standard exercises and simple repertoire.<br>Remarks/Examples |

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| | e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
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| **MU.68.S.3.4:** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Remarks/Examples |
| | e.g., error detection, interval reinforcement |
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| **MU.68.S.3.6:** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Remarks/Examples |
| | e.g., independently, collaboratively |
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# Course: M/J Vocal Ensemble 2- 1303110

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4190.aspx

## BASIC INFORMATION

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|---|---|
| **Course Title:** | M/J Vocal Ensemble 2 |
| **Course Number:** | 1303110 |
| **Course Abbreviated Title:** | M/J VOCAL ENS 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with previous vocal ensemble experience continue to build musicianship and performance skills through the study, rehearsal, and performance of high-quality ensemble literature in a variety of styles. Student musicians learn to self-assess and collaborate as they study relevant musical styles and time periods. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (29)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.68.WHST.3 Research to Build and Present Knowledge**

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| **LACC.68.WHST.3.9 :** | Draw evidence from informational texts to support analysis reflection, and research.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Research to Build and Present Knowledge |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10 |

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| | Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

**LACC.7.SL.2 Presentation of Knowledge and Ideas**

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

**MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.**

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

**MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.**

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of |

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| | solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.2 Careers in and related to the arts significantly and positively impact local and global economies.**

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| **MU.68.F.2.1 :** | Describe several routes a composition or performance could travel from creator to consumer.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Careers in and related to the arts significantly and positively impact local and global economies.<br>Remarks/Examples<br>e.g., MIDI and other technology, production, sharing on the Internet, home studios, professional recording studios, sales |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, |

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| | mutual respect |
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| **MU.68.F.3.2 :** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts. |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples |
| | e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |
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**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.H.3 Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.**

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| **MU.68.H.3.1 :** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples |
| | e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: |

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| | cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.H.3.2 :** | Discuss how the absence of music would affect other content areas and contexts.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Connections among the arts and other disciplines strengthen learning and the ability to transfer knowledge and skills to and from other fields.<br>Remarks/Examples<br>e.g., theatre and dance, movies, sporting events, video games, commercial advertising, social gatherings, civic and religious ceremonies, plays |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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|---|---|
| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |

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| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.3 :** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art. |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |

| | Remarks/Examples |
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| | e.g., independently, collaboratively |
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# Course: M/J Vocal Ensemble 1- 1303100

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4188.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Vocal Ensemble 1 |
| **Course Number:** | 1303100 |
| **Course Abbreviated Title:** | M/J VOCAL ENS 1 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students with little or no small vocal ensemble experience develop musicianship and performance skills as they study, rehearse, and perform high-quality ensemble literature in diverse styles. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (24)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.

MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

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| **LACC.6.SL.1.2:** | Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study. |
| **LACC.6.SL.1.3:** | Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. |
| **LACC.6.SL.2.4:** | Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. |
| **LACC.68.RST.2.4:** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics. |
| **LACC.68.WHST.2.4:** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. |
| **LACC.68.WHST.3.9:** | Draw evidence from informational texts to support analysis reflection, and research. |
| **MU.68.C.1.1:** | Develop strategies for listening to unfamiliar musical works.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2:** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |
| **MU.68.C.2.1:** | Critique personal performance, experiment with a variety of |

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| | solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |
| **MU.68.C.2.2:** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |
| **MU.68.F.3.2:** | Investigate and discuss laws that protect intellectual property, and practice safe, legal, and responsible acquisition and use of musical media. |
| **MU.68.H.1.4:** | Classify authentic stylistic features in music originating from various cultures.<br>Remarks/Examples<br>e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |
| **MU.68.H.2.3:** | Classify the literature being studied by genre, style, and/or time period. |
| **MU.68.H.3.1:** | Identify connections among music and other content areas and/or contexts through interdisciplinary collaboration.<br>Remarks/Examples<br>e.g., school: other music classes, social studies, dance, physical education, science, health, math, world languages; community: cultural connections and traditions, ceremonial music, sales and advertising, communication |
| **MU.68.O.3.1:** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, |

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| | orchestration |
| **MU.68.O.3.2:** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works. |
| **MU.68.S.1.3:** | Arrange a short musical piece by manipulating melody, form, rhythm, and/or voicing. |
| **MU.68.S.1.4:** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |
| **MU.68.S.2.2:** | Transfer performance techniques from familiar to unfamiliar pieces. |
| **MU.68.S.3.1:** | Sing and/or play age-appropriate repertoire expressively.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2:** | Demonstrate proper vocal or instrumental technique.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3:** | Sight-read standard exercises and simple repertoire.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4:** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.6:** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques. |

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| | Remarks/Examples |
| | e.g., independently, collaboratively |
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# Course: M/J Vocal Techniques 3- 1303090

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4187.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Vocal Techniques 3 |
| **Course Number:** | 1303090 |
| **Course Abbreviated Title:** | M/J VOCAL TECNQS 3 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Student musicians build on previous instruction to develop high levels of musicianship, technical proficiency, and performance skills through preparation of technically challenging scales, etudes, and solo literature. Students use problem-solving, critical thinking, and reflection to demonstrate the skills of disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (29)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.8.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.8.SL.1 Comprehension and Collaboration**

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| **LACC.8.SL.1.2 :** | Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.8.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

## LACC.8.SL.2 Presentation of Knowledge and Ideas

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| **LACC.8.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

## MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |

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| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |

**MU.68.H.1 Through study in the arts, we learn about and honor others and the worlds in which they live(d).**

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| **MU.68.H.1.1 :** | Describe the functions of music from various cultures and time periods.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.2 :** | Identify the works of representative composers within a specific style or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d). |
| **MU.68.H.1.4 :** | Classify authentic stylistic features in music originating from various cultures.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through study in the arts, we learn about and honor others and the worlds in which they live(d).<br>Remarks/Examples |

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| | e.g., rhythm, layered texture, key patterns, tonality, melodic line, quarter- or semi-tones, national folk melodies, improvisation, instrumentation, aural/oral traditions, drumming patterns |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.O.1 Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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| | Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10 |

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| | Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples |

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| | e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |

# Course: M/J Vocal Techniques 2- 1303080

**Direct link to this page:**http://www.cpalms.org/Courses/CoursePagePublicPreviewCourse4183.aspx

## BASIC INFORMATION

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| **Course Title:** | M/J Vocal Techniques 2 |
| **Course Number:** | 1303080 |
| **Course Abbreviated Title:** | M/J VOCAL TECNQS 2 |
| **Course Path:** | **Section:** Grades PreK to 12 Education Courses **Grade Group:** Grades 6 to 8 Education Courses **Subject:** Music **SubSubject:** Choral Music |
| **Course length:** | Year (Y) |
| **Course Level:** | 2 |
| **Status:** | Draft - Board Approval Pending |
| **Version Description:** | Students build on previous instruction to strengthen their musicianship, technique, and performance skills through preparation of scales, etudes, and solo literature. Through problem-solving, critical thinking, and reflection, students develop the physical and cognitive skills necessary to be more disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. |

## STANDARDS (26)

**In addition to the listed benchmarks and standards, the following mathematical practices are required content:**

MACC.K12.MP.5.1: Use appropriate tools strategically.
MACC.K12.MP.6.1: Attend to precision.
MACC.K12.MP.7.1: Look for and make use of structure.

**In addition to the listed benchmarks and standards, the following clusters and Language Arts standards are required content:**

LACC.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**LACC.68.RST.2 Craft and Structure**

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| **LACC.68.RST.2.4 :** | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Craft and Structure |

**LACC.68.WHST.2 Production and Distribution of Writing**

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| **LACC.68.WHST.2.4 :** | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Production and Distribution of Writing |

**LACC.7.SL.1 Comprehension and Collaboration**

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| **LACC.7.SL.1.2 :** | Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |
| **LACC.7.SL.1.3 :** | Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.<br>Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning l Date Adopted or Revised: 12/10<br>Belongs to: Comprehension and Collaboration |

## LACC.7.SL.2 Presentation of Knowledge and Ideas

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| **LACC.7.SL.2.4 :** | Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.<br>Cognitive Complexity: Level 2: Basic Application of Skills & Concepts l Date Adopted or Revised: 12/10<br>Belongs to: Presentation of Knowledge and Ideas |

## MU.68.C.1 Cognition and reflection are required to appreciate, interpret, and create with artistic intent.

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| **MU.68.C.1.1 :** | Develop strategies for listening to unfamiliar musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., listening maps, active listening, checklists |
| **MU.68.C.1.2 :** | Compare, using correct music vocabulary, the aesthetic impact of a performance to one's own hypothesis of the composer's intent.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Cognition and reflection are required to appreciate, interpret, and create with artistic intent.<br>Remarks/Examples<br>e.g., quality recordings, peer group and individual performances, composer notes, instrumentation, expressive elements, title |

## MU.68.C.2 Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.

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| **MU.68.C.2.1 :** | Critique personal performance, experiment with a variety of solutions, and make appropriate adjustments with guidance from teachers and peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., intonation, balance, blend, phrasing, rhythm |

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| **MU.68.C.2.2 :** | Critique, using correct music vocabulary, changes in one's own or others' musical performance resulting from practice or rehearsal.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Assessing our own and others' artistic work, using critical-thinking, problem-solving, and decision-making skills, is central to artistic growth.<br>Remarks/Examples<br>e.g., blend, balance, ensemble playing, sonority, technique, tone quality |

**MU.68.F.3 The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.**

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| **MU.68.F.3.1 :** | Describe how studying music can enhance citizenship, leadership, and global thinking.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The 21st-century skills necessary for success as citizens, workers, and leaders in a global economy are embedded in the study of the arts.<br>Remarks/Examples<br>e.g., dedication to mastering a task, problem-solving, self-discipline, dependability, ability to organize, cultural awareness, mutual respect |

**MU.68.H.2 The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.**

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| **MU.68.H.2.2 :** | Analyze how technology has changed the way music is created, performed, acquired, and experienced.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged.<br>Remarks/Examples<br>e.g., from harpsichord to piano; from phonograph to CD |
| **MU.68.H.2.3 :** | Classify the literature being studied by genre, style, and/or time period.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts reflect and document cultural trends and historical events, and help explain how new directions in the arts have emerged. |

**MU.68.O.1 Understanding the organizational structure of an art form provides a**

**foundation for appreciation of artistic works and respect for the creative process.**

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| **MU.68.O.1.1 :** | Compare performances of a musical work to identify artistic choices made by performers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Understanding the organizational structure of an art form provides a foundation for appreciation of artistic works and respect for the creative process.<br>Remarks/Examples<br>e.g., rhythm, melody, timbre, form, tonality, harmony, expressive elements; choral, orchestral, band, ensemble |

**MU.68.O.2 The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.**

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| **MU.68.O.2.2 :** | Demonstrate knowledge of major and minor tonalities through performance and composition.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The structural rules and conventions of an art form serve as both a foundation and departure point for creativity.<br>Remarks/Examples<br>e.g., scales; key signatures; relative major/minor; parallel major/minor |

**MU.68.O.3 Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.**

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| **MU.68.O.3.1 :** | Describe how the combination of instrumentation and expressive elements in a musical work can convey a specific thought, idea, mood, and/or image.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world.<br>Remarks/Examples<br>e.g., tempo markings, expression markings, articulation markings, phrasing, scales, modes, harmonic structure, timbre, rhythm, orchestration |
| **MU.68.O.3.2 :** | Perform the expressive elements of a musical work indicated by the musical score and/or conductor, and transfer new knowledge |

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| | and experiences to other musical works.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Every art form uses its own unique language, verbal and non-verbal, to document and communicate with the world. |

**MU.68.S.1 The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.**

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| **MU.68.S.1.1 :** | Improvise rhythmic and melodic phrases to accompany familiar songs and/or standard harmonic progressions.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., blues, rock |
| **MU.68.S.1.4 :** | Sing or play melodies by ear with support from the teacher and/or peers.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: The arts are inherently experiential and actively engage learners in the processes of creating, interpreting, and responding to art.<br>Remarks/Examples<br>e.g., melodies using traditional classroom instruments and/or voice |

**MU.68.S.2 Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.**

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| **MU.68.S.2.1 :** | Perform music from memory to demonstrate knowledge of the musical structure.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts strengthens our ability to remember, focus on, process, and sequence information.<br>Remarks/Examples<br>e.g., basic themes, patterns, tonality, melody, harmony |
| **MU.68.S.2.2 :** | Transfer performance techniques from familiar to unfamiliar pieces.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Development of skills, techniques, and processes in the arts |

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| | strengthens our ability to remember, focus on, process, and sequence information. |

**MU.68.S.3 Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.**

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|---|---|
| **MU.68.S.3.1 :** | Sing and/or play age-appropriate repertoire expressively.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., technique, phrasing, dynamics, tone quality, blend, balance, intonation, kinesthetic support/response |
| **MU.68.S.3.2 :** | Demonstrate proper vocal or instrumental technique.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., posture, breathing, fingering, embouchure, bow technique, tuning, strumming |
| **MU.68.S.3.3 :** | Sight-read standard exercises and simple repertoire.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., note and rest values, key signatures, time signatures, expressive markings, special harmonic and/or notation symbols |
| **MU.68.S.3.4 :** | Compare written notation to aural examples and analyze for accuracy of rhythm and pitch.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., error detection, interval reinforcement |
| **MU.68.S.3.5 :** | Notate rhythmic phrases and/or melodies, in varying simple meters, performed by someone else. |

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| | Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques. |
| **MU.68.S.3.6 :** | Develop and demonstrate efficient rehearsal strategies to apply skills and techniques.<br>Cognitive Complexity: N/A l Date Adopted or Revised: 12/10<br>Belongs to: Through purposeful practice, artists learn to manage, master, and refine simple, then complex, skills and techniques.<br>Remarks/Examples<br>e.g., independently, collaboratively |