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About the Academic Knowledge and Skills (AKS) Curriculum

The AKS are the standards for academic excellence for all students in Gwinnett County Public Schools (GCPS). In every GCPS classroom, instruction and assessment are tailored so that all students learn the AKS. The alignment of AKS with standardized assessments—such as the SAT and ACT college-admissions tests—ensures that GCPS students are well-prepared for these national measurements of achievement. GCPS’ rigorous AKS curriculum also aligns with the state curriculum—the Common Core Georgia Performance Standards (CCGPS) in Language Arts, Mathematics, and literacy standards in Science, Social Studies, and Technical Education; and the Georgia Performance Standards (GPS) and the Quality Core Curriculum (QCC) in other content areas. This alignment assures that students are prepared for state tests, including the Georgia High School Graduation Tests, the Georgia High School Writing Test, and state-required End of Course Test for designated high school courses.

Since its inception in 1996, GCPS’ AKS curriculum has reflected the collective wisdom of thousands of educators and community members who worked together to determine what students need to know and be able to do in order to be successful at the next grade level and in the future. This investment by GCPS’ stakeholders has ensured that the AKS curriculum remains a rigorous and relevant blueprint for student learning in Gwinnett. As part of that ongoing effort, the GEMS Oversight Committee—made up of community and GCPS staff members—meets annually to review proposed additions, deletions, and changes to the AKS that come out of school and community surveys. Following validation by the GEMS committee, recommendations are submitted to the superintendent for approval by the School Board, with implementation the following school year.

High School Graduation Requirements and Required Testing

Graduation requirements and required testing vary, depending on the year a student entered 9th grade, See graduation flyers specific to an entering freshman class on the GCPS website or contact the local school to learn more.

Notes about this Book

- Correlations to the following state-required curriculum standards/objectives and high school assessments are indicated for the respective Academic Knowledge and Skills: Common Core Georgia Performance Standards (CCGPS), Georgia Performance Standards (GPS), Quality Core Curriculum (QCC), SAT (SAT) and ACT (ACT) college-admissions tests, Georgia High School Graduation Test (HSGT), and Character Education (CE).
- In mathematics course names, CC refers to a course reflecting the Common Core.
- Academic Knowledge and Skills beginning with “explore” will not be assessed for mastery at that grade level, but are prerequisite for mastery at a higher grade level.
- Comprehensive AKS booklets like this one are available by grade level (K–8 and combined grades for high school) and by core academic subject (Language Arts, Mathematics, Science, and Social Studies) on the district website at www.gwinnett.k12.ga.us. These booklets are posted in PDF form.
- Parents also can find an online PDF of The Choice Book, which provides an overview of the high school experience, high school and postsecondary planning tools, and a “course catalog.” Rising 9th graders receive a printed copy of The Choice Book. The Choice Book is specific to each entering freshman class. Families may access the appropriate copy of The Choice Book for their student’s class on the school system website. (Click on the “Publications for Students” link on the Parents or Students tabs.)
- The AKS numbering system was developed to allow for additions and deletions of AKS without changing the number reference of other AKS. The reference code includes the subject and/or grade level, a letter representing the topic strand, and the year implemented. (See the example to the right.)
Character Education

The school system supports a mandate from the Georgia General Assembly requiring all schools to teach character education. Society and culture are tied together through common threads that guide the way we live, work, and learn. These common beliefs are taught at home and reinforced by the community, schools, religious institutions, and youth service groups. These basic tenets guide the way Gwinnett County teachers teach and the way the school system conducts the business of teaching and learning. Character education is thoroughly embedded in the AKS curriculum. Traits emphasized in the curriculum include the following:

courage  respect for  self-control  generosity  respect for  creativity
patriotism  others  courtesy  punctuality  environment  sportsmanship
citizenship  cooperation  compassion  cleanliness  respect for  loyalty
honesty  kindness  tolerance  cheerfulness  creator  perseverance
fairness  self-respect  diligence  school pride  patience  virtue

Parent Involvement

Research shows that when parents are involved in their children’s education at home, their children do better in school. When parents are involved at school, their children’s achievement excels and the schools they attend become even stronger.

Be There is a national movement that inspires parents to become more involved in their child’s education and their public schools. Teachable moments are everywhere. You can be your child’s favorite teacher by connecting in meaningful ways as you go through the ordinary routines of the day… driving in the car, preparing a meal, shopping, or doing chores. Below, you will find tips for helping your child have a successful high school experience. Look for more helpful tip sheets and other resources on the school system website and your local school website.

Suggestions for Helping Your Student Achieve Academically

The school system encourages parents to be an active part of their student’s education. Following are a few ways you can be involved:

• Review the AKS for your student’s classes each year. You also can access the AKS on the system’s website (www.gwinnett.k12.ga.us).
• Be familiar with important information about required assessments and graduation requirements. You can find this information in your student’s copy of The Choice Book or on the school system website. (The Choice Book is specific to each entering freshman class.)
• Ask to see your student’s work and talk about what he or she is learning in school.
• Encourage your student to take the most challenging classes in which he or she can be successful. Students who challenge themselves in high school are better prepared for college classes and other postsecondary studies.
• Support your student and communicate that his or her academic success is important to you.
• Remind your student to edit work when writing and to pay careful attention to appropriate grammar and spelling.
• Communicate with your student’s teachers.
• Attend curriculum nights, PTA meetings, and other school meetings.
• Share these Keys to School Success with your student:
  ➢ Be prepared each day. Have the needed materials and assignments for each class.
  ➢ Stay organized. Keep your desk, notebooks, book bag, and home study area neatly arranged.
  ➢ Use an agenda book or calendar to keep track of assignments and due dates. Check it every day.
  ➢ Give your best effort to both homework and in-class assignments. Complete assignments and turn them in on time.
  ➢ Review your work from each class every evening, even if you don’t have a homework assignment due the next day.
  ➢ Study for every test and quiz.
  ➢ Ask your teacher questions if you do not understand a lesson or an assignment.
  ➢ Get involved in at least one extracurricular activity.
A - Reading: Literature
• cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text (CCGPS) (LA09_A2012-1/ELACC9-10RL1)
• determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text (CCGPS) (LA09_A2012-2/ELACC9-10RL2)
• analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme (CCGPS) (LA09_A2012-3/ELACC9-10RL3)
• determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone) (CCGPS) (LA09_A2012-4/ELACC9-10RL4)
• analyze how an author’s choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise (CCGPS) (LA09_A2012-5/ELACC9-10RL5)
• analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature (CCGPS) (LA09_A2012-6/ELACC9-10RL6)
• analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden’s “Musée des Beaux Arts” and Breughel’s Landscape with the Fall of Icarus) (CCGPS) (LA09_A2012-7/ELACC9-10RL7)
• analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare) (CCGPS) (LA09_A2012-8/ELACC9-10RL9)
• read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range, by the end of grade 9 (CCGPS) (LA09_A2012-9/ELACC9-10RL10)

B - Reading: Informational Text
• cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text (CCGPS) (LA09_B2012-10/ELACC9-10RI1)
• determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text (CCGPS) (LA09_B2012-11/ELACC9-10RI2)
• analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them (CCGPS) (LA09_B2012-12/ELACC9-10RI3)
• determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper) (CCGPS) (LA09_B2012-13/ELACC9-10RI4)
• analyze in detail how an author’s ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter) (CCGPS) (LA09_B2012-14/ELACC9-10RI5)
• determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose (CCGPS) (LA09_B2012-15/ELACC9-10RI6)
• analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account (CCGPS) (LA09_B2012-16/ELACC9-10RI7)
• delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning (CCGPS) (LA09_B2012-17/ELACC9-10RI8)
• analyze seminal U.S. documents of historical and literary significance (e.g., Washington’s Farewell Address, the Gettysburg Address, Roosevelt’s Four Freedoms speech, King’s “Letter from Birmingham Jail”), including how they address related themes and concepts (CCGPS) (LA09_B2012-18/ELACC9-10RI9)
B – Reading: Informational Text (continued)

• read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range, by the end of grade 9 (CCGPS) (LA09_B2012-19/ELACC9-10R110)

C - Writing

• write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence (CCGPS) (LA09_C2012-20/ELAC9-10W1)
• write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content (CCGPS) (LA09_C2012-21/ELACC9-10W2)
• write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences (CCGPS) (LA09_C2012-22/ELACC9-10W3)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (LA09_C2012-23/ELACC9-10W4)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (LA09_C2012-24/ELACC9-10W5)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically (CCGPS) (LA09_C2012-25/ELACC9-10W6)
• conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve problems; narrow or broaden inquiries when appropriate; synthesize multiple sources on the subjects, demonstrating understanding of the subjects under investigation (CCGPS) (LA09_C2012-26/ELACC9-10W7)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (CCGPS) (LA09_C2012-27/ELACC9-10W8)
• draw evidence from literary or informational texts to support analysis, reflection, and research (CCGPS) (LA09_C2012-28/ELACC9-10W9)
• 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 tasks, purposes, and audiences (CCGPS) (LA09_C2012-29/ELACC9-10W10)

D - Speaking and Listening

• initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively (CCGPS) (LA09_D2012-30/ELACC9-10SL1)
• integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source (CCGPS) (LA09_D2012-31/ELACC9-10SL2)
• evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence (CCGPS) (LA09_D2012-32/ELACC9-10SL3)
• present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task (CCGPS) (LA09_D2012-33/ELACC9-10SL4)
• make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest (CCGPS) (LA09_D2012-34/ELACC9-10SL5)
• adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate (CCGPS) (LA09_D2012-35/ELACC9-10SL6)

E - Language

• demonstrate command of the conventions of standard English grammar and usage when writing or speaking (CCGPS) (LA09_E2012-36/ELACC9-10L1)
• demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing (CCGPS) (LA09_E2012-37/ELACC9-10L2)
E – Language *(continued)*

- apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening (CCGPS) (LA09_E2012-38/ELACC9-10L3)
- determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies (CCGPS) (LA09_E2012-39/ELACC9-10L4)
- demonstrate understanding of figurative language, word relationships, and nuances in word meanings (CCGPS) (LA09_E2012-40/ELACC9-10L5)
- acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression (CCGPS) (LA09_E2012-41/ELACC9-10L6)

**SOPHOMORE LANGUAGE ARTS**

**A - Reading: Literature**

- cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text (CCGPS) (LA10_A2012-1/ELACC9-10RL1)
- determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text (CCGPS) (LA10_A2012-2/ELACC9-10RL2)
- analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme (CCGPS) (LA10_A2012-3/ELACC9-10RL3)
- determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone) (CCGPS) (LA10_A2012-4/ELACC9-10RL4)
- analyze how an author’s choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise (CCGPS) (LA10_A2012-5/ELACC9-10RL5)
- analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature (CCGPS) (LA10_A2012-6/ELACC9-10RL6)
- analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden’s "Musée des Beaux Arts" and Breughel’s Landscape with the Fall of Icarus) (CCGPS) (LA10_A2012-7/ELACC9-10RL7)
- analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare) (CCGPS) (LA10_A2012-8/ELACC9-10RL9)
- read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently, with scaffolding as needed at the high end of the range, by the end of grade 10 (CCGPS) (LA10_A2012-9/ELACC9-10RL10)

**B - Reading: Informational Text**

- cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text (CCGPS) (LA10_B2012-10/ELACC0-10RI1)
- determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text (CCGPS) (LA10_B2012-11/ELACC0-10RI2)
- analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them (CCGPS) (LA10_B2012-12/ELACC0-10RI3)
- determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper) (CCGPS) (LA10_B2012-13/ELACC0-10RI4)
B - Reading: Informational Text (continued)

- analyze in detail how an author’s ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter) (CCGPS) (LA10_B2012-14/ELACC0-10RI5)
- determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose (CCGPS) (LA10_B2012-15/ELACC0-10RI6)
- analyze various accounts of a subject told in different mediums (e.g., a person’s life story in both print and multimedia), determining which details are emphasized in each account (CCGPS) (LA10_B2012-16/ELACC0-10RI7)
- delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning (CCGPS) (LA10_B2012-17/ELACC0-10RI8)
- analyze seminal U.S. documents of historical and literary significance (e.g., Washington’s Farewell Address, the Gettysburg Address, Roosevelt’s Four Freedoms speech, King’s “Letter from Birmingham Jail”), including how they address related themes and concepts (CCGPS) (LA10_B2012-18/ELACC0-10RI9)
- read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently, by the end of grade 10 (CCGPS) (LA10_B2012-19/ELACC0-10RI10)

C - Writing

- write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence (CCGPS) (LA10_C2012-20/ELACC9-10W1)
- write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content (CCGPS) (LA10_C2012-21/ELACC9-10W2)
- write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences (CCGPS) (LA10_C2012-22/ELACC9-10W3)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (LA10_C2012-23/ELACC9-10W4)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (LA10_C2012-24/ELACC9-10W5)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology’s capacity to link to other information and to display information flexibly and dynamically (CCGPS) (LA10_C2012-25/ELACC9-10W6)
- conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve problems; narrow or broaden the inquiries when appropriate; synthesize multiple sources on the subjects, demonstrating understanding of the subjects under investigation (CCGPS) (LA10_C2012-26/ELACC9-10W7)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation (CCGPS) (LA10_C2012-27/ELACC9-10W8)
- draw evidence from literary or informational texts to support analysis, reflection, and research (CCGPS) (LA10_C2012-28/ELACC9-10W9)
- 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 tasks, purposes, and audiences (CCGPS) (LA10_C2012-29/ELACC9-10W10)

D - Speaking and Listening

- initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively (CCGPS) (LA10_D2012-30/ELACC9-10SL1)
- integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source (CCGPS) (LA10_D2012-31/ELACC9-10SL2)
- evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence (CCGPS) (LA10_D2012-32/ELACC9-10SL3)
Language Arts

D - Speaking and Listening (continued)
• present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task (CCGPS) (LA10_D2012-33/ELACC9-10SL4)
• make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest (CCGPS) (LA10_D2012-34/ELACC9-10SL5)
• adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate (CCGPS) (LA10_D2012-35/ELACC9-10SL6)

E - Language
• demonstrate command of the conventions of standard English grammar and usage when writing or speaking (CCGPS) (LA10_E2012-36/ELACC9-10L1)
• demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing (CCGPS) (LA10_E2012-37/ELACC9-10L2)
• apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening (CCGPS) (LA10_E2012-38/ELACC9-10L3)
• determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 9–10 reading and content, choosing flexibly from a range of strategies (CCGPS) (LA10_E2012-39/ELACC9-10L4)
• demonstrate understanding of figurative language, word relationships, and nuances in word meanings (CCGPS) (LA10_E2012-40/ELACC9-10L5)
• acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression (CCGPS) (LA10_E2012-41/ELACC9-10L6)

Junior Language Arts

A - Reading: Literature
• cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain (CCGPS) (LA11_A2012-1/ELACC11-12R1)
• determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text (CCGPS) (LA11_A2012-2/ELACC11-12R2)
• analyze the impact of the author’s choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed) (CCGPS) (LA11_A2012-3/ELACC11-12R3)
• determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful (Include Shakespeare as well as other authors) (CCGPS) (LA11_A2012-4/ELACC11-12R4)
• analyze how an author’s choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact (CCGPS) (LA11_A2012-5/ELACC11-12R5)
• analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement) (CCGPS) (LA11_A2012-6/ELACC11-12R6)
• analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text (Include at least one play by Shakespeare and one play by an American dramatist) (CCGPS) (LA11_A2012-7/ELACC11-12R7)
• demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics (CCGPS) (LA11_A2012-8/ELACC11-12R9)
A - Reading: Literature (continued)
• read and comprehend literature, including stories, dramas, and poems, in the grade 11–CCR (College-Career Ready) text complexity band proficiently, with scaffolding as needed at the high end of the range, by the end of grade 11 (CCGPS) (LA11_A2012-9/ELACC11-12R10)

B - Reading: Informational Text
• cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain (CCGPS) (LA11_B2012-10/ELACC11-12RI1)
• determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text (CCGPS) (LA11_B2012-11/ELACC11-12RI2)
• analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text (CCGPS) (LA11_B2012-12/ELACC11-12RI3)
• determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10) (CCGPS) (LA11_B2012-13/ELACC11-12RI4)
• analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging (CCGPS) (LA11_B2012-14/ELACC11-12RI5)
• determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text (CCGPS) (LA11_B2012-15/ELACC11-12RI6)
• integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem (CCGPS) (LA11_B2012-16/ELACC11-12RI7)
• delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses) (CCGPS) (LA11_B2012-17/ELACC11-12RI8)
• analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln’s Second Inaugural Address) for their themes, purposes, and rhetorical features (CCGPS) (LA11_B2012-18/ELACC11-12RI9)
• read and comprehend literary nonfiction in the grade 11–CCR (College-Career Ready) text complexity band proficiently, with scaffolding as needed at the high end of the range, by the end of grade 11 (CCGPS) (LA11_B2012-19/ELACC11-12RI10)

C - Writing
• write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence (CCGPS) (LA11_C2012-20/ELACC11-12W1)
• write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content (CCGPS) (LA11_C2012-21/ELACC11-12W2)
• write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences (CCGPS) (LA11_C2012-22/ELACC11-12W3)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (LA11_C2012-23/ELACC11-12W4)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (LA11_C2012-24/ELACC11-12W5)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (LA11_C2012-25/ELACC11-12W6)
• conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve problems; narrow or broaden the inquiries when appropriate; synthesize multiple sources on the subjects, demonstrating understanding of the subjects under investigation (CCGPS) (LA11_C2012-26/ELACC11-12W7)
C - Writing (continued)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (LA11_C2012-27/ELACC11-12W8)
• draw evidence from literary or informational texts to support analysis, reflection, and research (CCGPS) (LA11_C2012-28/ELACC11-12W9)
• 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 tasks, purposes, and audiences (CCGPS) (LA11_C2012-29/ELACC11-12W10)

D - Speaking and Listening
• initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively (CCGPS) (LA11_D2012-30/ELACC11-12SL1)
• integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data (CCGPS) (LA11_D2012-31/ELACC11-12SL2)
• evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used (CCGPS) (LA11_D2012-32/ELACC11-12SL3)
• present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (CCGPS) (LA11_D2012-33/ELACC11-12SL4)
• make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest (CCGPS) (LA11_D2012-34/ELACC11-12SL5)
• adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate (CCGPS) (LA11_D2012-35/ELACC11-12SL6)

E - Language
• demonstrate command of the conventions of standard English grammar and usage when writing or speaking (CCGPS) (LA11_E2012-36/ELACC11-12L1)
• demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing (CCGPS) (LA11_E2012-37/ELACC11-12L2)
• apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening (CCGPS) (LA11_E2012-38/ELACC11-12L3)
• determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies (CCGPS) (LA11_E2012-39/ELACC11-12L4)
• demonstrate understanding of figurative language, word relationships, and nuances in word meanings (CCGPS) (LA11_E2012-40/ELACC11-12L5)
• acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression (CCGPS) (LA11_E2012-41/ELACC11-12L6)

Senior Language Arts

A - Reading: Literature
• cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain (CCGPS) (LA12_A2012-1/ELACC11-12RL1)
A - Reading: Literature (continued)

- determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text (CCGPS) (LA12_A2012-2/ELACC11-12RL2)
- analyze the impact of the author’s choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed) (CCGPS) (LA12_A2012-3/ELACC11-12RL3)
- determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful (Include Shakespeare as well as other authors) (CCGPS) (LA12_A2012-4/ELACC11-12RL4)
- analyze how an author’s choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact (CCGPS) (LA12_A2012-5/ELACC11-12RL5)
- analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement) (CCGPS) (LA12_A2012-6/ELACC11-12RL6)
- analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text (Include at least one play by Shakespeare and one play by an American dramatist) (CCGPS) (LA12_A2012-7/ELACC11-12RL7)
- demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics (CCGPS) (LA12_A2012-8/ELACC11-12RL9)
- read and comprehend literature, including stories, dramas, and poems, at the high end of the grade 11–CCR (College-Career Ready) text complexity band independently and proficiently, by the end of grade 12 (CCGPS) (LA12_A2012-9/ELACC11-12RL10)

B - Reading: Informational Text

- cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain (CCGPS) (LA12_B2012-10/ELACC11-12RI1)
- determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text (CCGPS) (LA12_B2012-11/ELACC11-12RI2)
- analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text (CCGPS) (LA12_B2012-12/ELACC11-12RI3)
- determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10) (CCGPS) (LA12_B2012-13/ELACC11-12RI4)
- analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging (CCGPS) (LA12_B2012-14/ELACC11-12RI5)
- determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text (CCGPS) (LA12_B2012-15/ELACC11-12RI6)
- integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem (CCGPS) (LA12_B2012-16/ELACC11-12RI7)
- delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses) (CCGPS) (LA12_B2012-17/ELACC11-12RI8)
- analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln’s Second Inaugural Address) for their themes, purposes, and rhetorical features (CCGPS) (LA12_B2012-18/ELACC11-12RI9)
- read and comprehend literary nonfiction at the high end of the grade 11–CCR (College-Career Ready) text complexity band independently and proficiently, by the end of grade 12 (CCGPS) (LA12_B2012-19/ELACC11-12RI10)
C - Writing

- write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence (CCGPS) (LA12_C2012-20/ELACC11-12W1)
- write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content (CCGPS) (LA12_C2012-21/ELACC11-12W2)
- write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences (CCGPS) (LA12_C2012-22/ELACC11-12W3)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (LA12_C2012-23/ELACC11-12W4)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (LA12_C2012-24/ELACC11-12W5)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (LA12_C2012-25/ELACC11-12W6)
- conduct short as well as more sustained research projects to answer questions (including self-generated questions) or solve problems; narrow or broaden the inquiries when appropriate; synthesize multiple sources on the subjects, demonstrating understanding of the subjects under investigation (CCGPS) (LA12_C2012-26/ELACC11-12W7)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (LA12_C2012-27/ELACC11-12W8)
- draw evidence from literary or informational texts to support analysis, reflection, and research (CCGPS) (LA12_C2012-28/ELACC11-12W9)
- 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 tasks, purposes, and audiences (CCGPS) (LA12_C2012-29/ELACC11-12W10)

D - Speaking and Listening

- initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 11–12 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively (CCGPS) (LA12_D2012-30/ELACC11-12SL1)
- integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data (CCGPS) (LA12_D2012-31/ELACC11-12SL2)
- evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used (CCGPS) (LA12_D2012-32/ELACC11-12SL3)
- present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks (CCGPS) (LA12_D2012-33/ELACC11-12SL4)
- make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest (CCGPS) (LA12_D2012-34/ELACC11-12SL5)
- adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate (CCGPS) (LA12_D2012-35/ELACC11-12SL6)

E - Language

- demonstrate command of the conventions of standard English grammar and usage when writing or speaking (CCGPS) (LA12_E2012-36/ELACC11-12L1)
- demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing (CCGPS) (LA12_E2012-37/ELACC11-12L2)
- apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening (CCGPS) (LA12_E2012-38/ELACC11-12L3)
E – Language (continued)
• determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 reading and content, choosing flexibly from a range of strategies (CCGPS) (LA12_E2012-39/ELACC11-12L4)
• demonstrate understanding of figurative language, word relationships, and nuances in word meanings (CCGPS) (LA12_E2012-40/ELACC11-12L5)
• acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression (CCGPS) (LA12_E2012-41/ELACC11-12L6)

Composition Workshop

A -
• prewrite to generate ideas for writing (GPS) (LAWW_A2010-1)
• draft writing to capture ideas and develop fluency (GPS) (LAWW_A2010-2)
• revise writing to match purposes with audience and to improve content, organization, and style (GPS) (LAWW_A2010-3)
• revise writing to eliminate wordiness, excessive predictions, and roundabout expressions (GPS) (LAWW_A2010-4)
• edit for spelling, fragments, and run-on sentences (GPS) (LAWW_A2010-5)
• edit for misplaced and dangling modifiers, split infinitives, and non-parallel elements (GPS) (LAWW_A2010-6)
• use writing handbooks, grammar checkers, and references to edit usage and mechanics (GPS) (LAWW_A2010-7)
• write and support thesis statements (GPS) (LAWW_A2010-8)
• develop a central idea with examples, illustrations, facts, and details (GPS) (LAWW_A2010-9)
• write logical and effective transitions between ideas and paragraphs (GPS) (LAWW_A2010-10)
• maintain unity and coherence (GPS) (LAWW_A2010-11)
• write to report answers to research questions (GPS) (LAWW_A2010-12)
• construct persuasive written arguments related to themes of literature (GPS) (LAWW_A2010-13)
• write proposals and action plans (GPS) (LAWW_A2010-14)
• write college-style essays (GPS) (LAWW_A2010-15)
• prepare bibliographies, tables of contents, title pages, and appendices (GPS) (LAWW_A2010-16)
• establish voice through tone, word choice, rhetorical devices, and literary devices (GPS) (LAWW_A2010-17)
• use precise language, action verbs, sensory details, appropriate modifiers, and active rather than passive voice (GPS) (LAWW_A2010-18)
• write, combine, and vary sentences to match purposes and audience (GPS) (LAWW_A2010-19)
• use a variety of sentence types in writing (e.g., simple, compound, complex, and compound-complex sentences) (GPS) (LAWW_A2010-20)
• integrate quotations and citations into a written text while maintaining the flow of ideas (GPS) (LAWW_A2010-21)
• synthesize and summarize information to avoid plagiarism (GPS) (LAWW_A2010-22)
Dramatic Interpretation/Competitive Speaking/Debate

A - Competitive Speaking
- define and differentiate among various debate propositions and among debate formats (GPS) (LACS_A2010-1)
- demonstrate understanding of competitive speaking vocabulary (GPS) (LACS_A2010-2)
- identify methods of reasoning and types of fallacies (GPS) (LACS_A2010-3)
- demonstrate research skills involving proposition of policy using appropriate techniques, resources, and documentation (GPS) (LACS_A2010-4)
- demonstrate critical-thinking skills by developing an affirmative and negative case (GPS) (LACS_A2010-5)
- adjust reading rate to match purpose (GPS) (LACS_A2010-6)
- demonstrate an understanding of a national debate topic (GPS) (LACS_A2010-7)
- demonstrate appropriate speaking skills in a round of competitive speaking or dramatic interpretation (GPS) (LACS_A2010-8)
- demonstrate competence in the use of cross-examination techniques (GPS) (LACS_A2010-9)
- analyze and evaluate presentations of other students (GPS) (LACS_A2010-10)
- demonstrate respect for the integrity of evidence and accurate representation of the ideas of others (GPS) (LACS_A2010-11)
- identify and acceptably utilize parliamentary procedure rules (GPS) (LACS_A2010-12)
- demonstrate an understanding of forensic tournament procedures and conduct (GPS) (LACS_A2010-13)

B - Extemporaneous (Impromptu) and Oratory
- utilize persuasive and extemporaneous speaking skills (GPS) (LACS_B2010-14)
- utilize the school’s media center, its resources, and the Internet to document current events (GPS) (LACS_B2010-15)
- demonstrate topic control and limitation (GPS) (LACS_B2010-16)
- identify and summarize the main and subordinate ideas in a written work (GPS) (LACS_B2010-17)
- recognize different purposes and methods of writing, identify a writer’s point-of-view and tone, and comprehend a writer’s meaning inferentially as well as literally (GPS) (LACS_B2010-18)
- distinguish own personal opinions and assumptions from those of other writers (GPS) (LACS_B2010-19)
- practice thesis support, appropriate documentation, and synthesis of information from various sources (GPS) (LACS_B2010-20)

C - Dramatic Events
- recognize and describe personal and universal meanings in interpretation (GPS) (LACS_C2010-22)
- recognize the importance of energy, build, and control for precise nonverbal communication (GPS) (LACS_C2010-23)
- apply skills for ensemble blend, group communication, focus, and balance in improvisation, rehearsal of scripted materials, and performance (GPS) (LACS_C2010-24)
- read and use scripted materials to determine the text and subtext of the script (GPS) (LACS_C2010-25)
- apply techniques of emotional expression to portray human personalities in characterization (GPS) (LACS_C2010-26)
- use movement to discover and explore thought, feeling, sensory awareness, and emotional responses (GPS) (LACS_C2010-27)
- apply and synthesize vocal techniques to create characterization in scripted and improvised activities (GPS) (LACS_C2010-28)
- use improvisation as a tool for creating and developing characterization (GPS) (LACS_C2010-29)
- read, discuss, and write to formulate reasoned judgments about written and oral communication in various media genres and literary forms (GPS) (LACS_C2010-30)
- read, edit, and practice dramatic, humorous, and oral interpretation of various works (GPS) (LACS_C2010-31)
Journalism - Literary Magazine

A - Critical Thinking and Writing

- prewrite and brainstorm to generate ideas for writing (QCC) (LALM_A2010-1)
- draft writing to capture ideas and develop fluency (QCC) (LALM_A2010-2)
- revise writing to match purposes with audience and to improve content, organization, and style (QCC) (LALM_A2010-3)
- revise writing to eliminate wordiness (QCC) (LALM_A2010-4)
- use grammar checkers and references to edit usage and mechanics (QCC) (LALM_A2010-5)
- maintain unity and coherence (QCC) (LALM_A2010-6)
- write to report answers to research questions (QCC) (LALM_A2010-7)
- write, combine, and vary sentences to match purposes and audience (QCC) (LALM_A2010-8)
- comprehend that words gather meaning from their context and carry connotation and denotation (QCC) (LALM_A2010-9)
- distinguish between fact and opinion (QCC) (LALM_A2010-10)
- comprehend, develop, and use specifics and generalizations (QCC) (LALM_A2010-11)
- define unfamiliar words by using context clues (QCC) (LALM_A2010-12)
- write Standard American English sentences with correct verb forms, punctuation, capitalization, possessives, plural forms and other mechanics, word choice, and spelling (QCC) (LALM_A2010-13)
- use language appropriate to situation and audience (QCC) (LALM_A2010-14)
- write for many purposes (poetry, nonfiction, and fiction) (QCC) (LALM_A2010-15)
- defend conclusions rationally (QCC) (LALM_A2010-16)
- analyze an issue to determine its timeliness and relevance to the magazine (QCC) (LALM_A2010-17)
- use proper documentation to avoid plagiarism (QCC) (LALM_A2010-18)

B - Publishing

- demonstrate ability to use desktop publishing (QCC) (LALM_B2010-19)
- use appropriate photographic rules and guidelines (QCC) (LALM_B2010-20)
- collect and manage student photography/art to fit the format of the literary magazine (QCC) (LALM_B2010-21)
- demonstrate knowledge of basic layout and design principles (QCC) (LALM_B2010-22)
- demonstrate an ability to crop pictures and art (QCC) (LALM_B2010-23)
- recognize the value of quality pictures and art (QCC) (LALM_B2010-24)
- use technology appropriately to create a finished product (QCC) (LALM_B2010-25)
- use editing software appropriately (QCC) (LALM_B2010-26)

C - Management and Standards

- develop an understanding of ethical concerns (QCC) (LALM_C2010-27)
- demonstrate understanding of the First Amendment (QCC) (LALM_C2010-28)
- understand and practice copyright law (QCC) (LALM_C2010-29)
- apply the technical terminology specific to literary magazine (QCC) (LALM_C2010-30)
- identify strategies for prioritizing tasks to meet deadlines (QCC) (LALM_C2010-31)
- speak so others can hear and understand (QCC) (LALM_C2010-32)
- work as a team member to solve problems (QCC) (LALM_C2010-33)

D - Research and Interview

- read and review literary magazines, charts, graphs, technical documents, and local/national media for research (QCC) (LALM_D2010-34)
- read critically, ask pertinent questions, recognize assumptions and implications, and evaluate ideas (QCC) (LALM_D2010-35)
- take notes on the main and subordinate ideas in interviews and discussions and report accurately what others have said (QCC) (LALM_D2010-36)
D – Research and Interview (continued)

- use the research process (select a topic, formulate questions, identify key words, choose sources, skim, paraphrase, take notes, organize, summarize, and present) (QCC) (LALM_D2010-37)
- identify, comprehend, and summarize the main and subordinate ideas (QCC) (LALM_D2010-38)
- acquire new vocabulary through research and interview (QCC) (LALM_D2010-39)
- use a variety of print and non-print resources as part of the research for stories (QCC) (LALM_D2010-40)
- draw reasoned conclusions from various sources (QCC) (LALM_D2010-41)
- recognize speaker’s purpose and identify verbal and nonverbal components of communication (body language, facial expressions, gestures) (QCC) (LALM_D2010-42)
- use research and interviews to gain insight into human behavior (QCC) (LALM_D2010-43)
- identify and use appropriate interviewing skills (QCC) (LALM_D2010-44)

Journalism - Newspaper

A - Critical Thinking and Writing

- prewrite and brainstorm to generate ideas for writing (QCC) (LANP_A2010-1)
- draft writing to capture ideas and develop fluency (QCC) (LANP_A2010-2)
- revise writing to match purposes with audience and to improve content, organization, and style (QCC) (LANP_A2010-3)
- revise writing to eliminate wordiness (QCC) (LANP_A2010-4)
- use grammar checkers and references to edit usage and mechanics (QCC) (LANP_A2010-5)
- maintain unity and coherence (QCC) (LANP_A2010-6)
- write to report answers to research questions (QCC) (LANP_A2010-7)
- write, combine, and vary sentences to match purposes and audience (QCC) (LANP_A2010-8)
- understand that words gather meaning from their context and carry connotation and denotation (QCC) (LANP_A2010-9)
- distinguish between fact and opinion (QCC) (LANP_A2010-10)
- comprehend, develop, and use specifics and generalizations (QCC) (LANP_A2010-11)
- define unfamiliar words by using context clues (QCC) (LANP_A2010-12)
- write Standard American English sentences with correct verb forms, punctuation, capitalization, possessives, plural forms and other mechanics, word choice, and spelling (QCC) (LANP_A2010-13)
- use language appropriate to situation and audience (QCC) (LANP_A2010-14)
- write for many purposes (news, editorials, features, and sports) (QCC) (LANP_A2010-15)
- defend editorial conclusions rationally (QCC) (LANP_A2010-16)
- make independent decisions and evaluative judgments while working on newspaper production (QCC) (LANP_A2010-17)
- demonstrate a sensitivity to bias in language, gender, race, religion, physical challenges, and multicultural situations (QCC) (LANP_A2010-18)
- use proper documentation to avoid plagiarism (QCC) (LANP_A2010-19)
- identify the characteristics of well-written copy (objectivity, brevity) (QCC) (LANP_A2010-20)
- identify the role of captions in supporting photographs (QCC) (LANP_A2010-21)
- identify the role of headlines in capturing attention (QCC) (LANP_A2010-22)

B - Publishing

- demonstrate ability to use desktop publishing (QCC) (LANP_B2010-23)
- use appropriate photographic rules and guidelines (QCC) (LANP_B2010-24)
- collect and manage student photography/art to fit the format of the newspaper/media (QCC) (LANP_B2010-25)
- demonstrate knowledge of basic layout and design principles (QCC) (LANP_B2010-26)
- demonstrate an ability to crop pictures and art (QCC) (LANP_B2010-27)
- recognize the value of quality pictures and art (QCC) (LANP_B2010-28)
Language Arts

B - Publishing (continued)
- use editing software appropriately (QCC) (LANP_B2010-29)

C - Management and Standards
- develop an understanding of ethical concerns (QCC) (LANP_C2010-30)
- demonstrate understanding of the First Amendment (QCC) (LANP_C2010-31)
- understand and practice copyright law (QCC) (LANP_C2010-32)
- apply the technical terminology specific to newspapers (QCC) (LANP_C2010-33)
- identify strategies for prioritizing tasks to meet deadlines (QCC) (LANP_C2010-34)
- speak so others can hear and understand (QCC) (LANP_C2010-35)
- work as a team member to solve problems (QCC) (LANP_C2010-36)
- develop marketing and managing strategies and skills for selling advertisements (QCC) (LANP_C2010-37)

D - Research and Interview
- read and review literary magazines, charts, graphs, technical documents, and local/national media for research (QCC) (LANP_D2010-38)
- read critically, ask pertinent questions, recognize assumptions and implications, and evaluate ideas (QCC) (LANP_D2010-39)
- take notes on the main and subordinate ideas in interviews and discussions and report accurately what others have said (QCC) (LANP_D2010-40)
- use the research process (select a topic, formulate questions, identify key words, choose sources, skim, paraphrase, take notes, organize, summarize, and present) (QCC) (LANP_D2010-41)
- identify, comprehend, and summarize main and subordinate ideas (QCC) (LANP_D2010-42)
- acquire new vocabulary through research and interview (QCC) (LANP_D2010-43)
- use a variety of print and non-print resources as part of the research for stories (QCC) (LANP_D2010-44)
- draw reasoned conclusions from various sources (QCC) (LANP_D2010-45)
- recognize speaker’s purpose and identify verbal and non-verbal components of communication (body language, facial expressions, gestures) (QCC) (LANP_D2010-46)
- identify and use appropriate interviewing skills (QCC) (LANP_D2010-47)
- use research and interviews to gain insight into human behavior (QCC) (LANP_D2010-48)

Journalism - Yearbook

A - Production
- demonstrate how the layout of a document plays an essential role in a yearbook (QCC) (LAYB_A2010-1)
- define technical terms used in yearbook production (QCC) (LAYB_A2010-2)
- use a variety of techniques to solve design problems (QCC) (LAYB_A2010-3)
- apply knowledge of the principles and elements of design in creating a yearbook (QCC) (LAYB_A2010-4)
- display work habits and craftsmanship appropriate to the media and equipment being used (QCC) (LAYB_A2010-5)
- recognize yearbook components and the organization of those components (QCC) (LAYB_A2010-6)
- complete and use the ladder diagram for the yearbook (QCC) (LAYB_A2010-7)
- recognize the importance of a deadline and maintain the deadline schedule (QCC) (LAYB_A2010-8)
- recognize the purpose and use of each yearbook layout production tool (QCC) (LAYB_A2010-9)
- demonstrate an awareness of contemporary and historical developments as it relates to yearbook content (QCC) (LAYB_A2010-10)
- recognize the need for organized design in the yearbook and use that organization to place design elements in a creative, orderly fashion (QCC) (LAYB_A2010-11)
- explore the role typography plays in the presentation of yearbook content (QCC) (LAYB_A2010-12)
A – Production (continued)

- work as a team member to solve problems (QCC) (LAYB_A2010-13)
- use templates to create desktop publishing documents (QCC) (LAYB_A2010-14)
- edit text and graphics (QCC) (LAYB_A2010-15)
- print and assemble desktop publishing documents and publications (QCC) (LAYB_A2010-16)
- define terms related to desktop publishing (QCC) (LAYB_A2010-17)
- demonstrate proper use of computer equipment (QCC) (LAYB_A2010-18)
- use tools to crop a photograph (QCC) (LAYB_A2010-19)
- produce photographs using a variety of approaches to composition and subject matter (QCC) (LAYB_A2010-20)
- demonstrate an ability to use photographic technology to organize and convey thematic content, ideas, feelings, or moods (QCC) (LAYB_A2010-21)
- recognize the value of quality pictures (QCC) (LAYB_A2010-22)

B - Business Applications

- develop marketing and managing strategies and skills for selling yearbooks and advertisements (QCC) (LAYB_B2010-23)
- develop a marketing product plan (QCC) (LAYB_B2010-24)
- develop an understanding of ethical concerns (QCC) (LAYB_B2010-25)
- develop appropriate oral and written communication skills (QCC) (LAYB_B2010-26)
- prepare and maintain records (QCC) (LAYB_B2010-27)
- identify the set of financial goals and necessary strategies to produce a yearbook (QCC) (LAYB_B2010-28)
- identify the financial goals of the yearbook and business-related responsibilities (QCC) (LAYB_B2010-29)
- identify the sources of yearbook income and expenses (QCC) (LAYB_B2010-30)
- identify the steps involved in marketing a yearbook and the rationale behind the marketing strategies chosen (QCC) (LAYB_B2010-31)

C - Critical Thinking and Writing

- use note-taking skills incorporating critical-listening and reading techniques (QCC) (LAYB_C2010-32)
- identify and use appropriate interviewing skills (QCC) (LAYB_C2010-33)
- apply systematic methods for proofreading (QCC) (LAYB_C2010-34)
- write logical and coherent phrases, sentences, and paragraphs incorporating correct spelling, grammar, and punctuation (QCC) (LAYB_C2010-35)
- record, review, edit, and revise written products (QCC) (LAYB_C2010-36)
- record data in chronological, spatial, effect-to-cause, cause-to-effect, and problem-cause-solution sequencing (QCC) (LAYB_C2010-37)
- use proper documentation procedure to avoid plagiarism (QCC) (LAYB_C2010-38)
- demonstrate a sensitivity to bias in language, gender, race, religion, physically challenged, and multicultural situations (QCC) (LAYB_C2010-39)
- make independent decisions and evaluative judgments while working within yearbook production (QCC) (LAYB_C2010-40)
- identify the benefits of brainstorming and how brainstorming can be applied to other creative endeavors (QCC) (LAYB_C2010-41)
- identify the role of copy in supporting photographs and completing the story (QCC) (LAYB_C2010-42)
- recognize captions and headlines as important parts of the yearbook copy (QCC) (LAYB_C2010-43)
- identify the characteristics of well-written copy (QCC) (LAYB_C2010-44)
ALGEBRA I CC

A - Algebra

• interpret expressions that represent a quantity in terms of its context (Emphasis on linear expressions and exponential expressions with integer exponents.) (CCGPS) (MAL1_A2012-1/MCC9-12.SSE.1)

• interpret parts of an expression such as terms, factors, and coefficients (Emphasis on linear expressions and exponential expressions with integer exponents.) (CCGPS) (MAL1_A2012-2/MCC9-12.SSE.1_a)

• interpret complicated expressions by viewing one or more of their parts as a single entity (Emphasis on linear expressions and exponential expressions with integer exponents.) (CCGPS) (MAL1_A2012-3/MCC9-12.SSE.1_b)

• create equations and inequalities in one variable and use them to solve problems (Include equations arising from linear and exponential functions) (CCGPS) (MAL1_A2012-4/MCC9-12.CED.1)

• create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales (Limit to linear and exponential equations and in the case of exponential equations, limit to situations requiring evaluation of exponential functions at integer inputs) (CCGPS) (MAL1_A2012-5/MCC9-12.CED.2)

• represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context (e.g., represent inequalities describing nutritional and cost constraints on combinations of different foods (Limit to linear equations and inequalities.)) (CCGPS) (MAL1_A2012-6/MCC9-12.CED.3)

• rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations (Limit to formulas with a linear focus.) (CCGPS) (MAL1_A2012-7/MCC9-12.CED.4)

• explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution; construct a viable argument to justify a solution method. (Students should focus on and master linear equations and be able to extend and apply their reasoning to other types of equations in future courses.) (CCGPS) (MAL1_A2012-8/MCC9-12.REI.1)

• solve linear equations and inequalities in one variable, including equations with coefficients represented by letters (Extend earlier work with solving linear equations to solving linear inequalities in one variable and to solving literal equations that are linear in the variable being solved for. Include simple exponential equations that rely only on application of the laws of exponents, such as 5^x = 125 or 2^x = 1/16) (CCGPS) (MAL1_A2012-9/MCC9-12.REI.3)

• solve a system of two equations in two variables using elimination and substitution methods (Limit to linear systems.) (CCGPS) (MAL1_A2012-10/MCC9-12.REI.5)

• solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables (CCGPS) (MAL1_A2012-11/MCC9-12.REI.6)

• demonstrate that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line) (CCGPS) (MAL1_A2012-12/MCC9-12.REI.10)

• explain why the x-coordinates of the points where the graphs of the equations y = f(x) and y = g(x) intersect are the solutions of the equation f(x) = g(x); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations; include cases where f(x) and/or g(x) are linear, exponential, functions (CCGPS) (MAL1_A2012-13/MCC9-12.REI.11)

• graph the solutions to a linear inequality in two variables as a half plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes (CCGPS) (MAL1_A2012-14/MCC9-12.REI.12)

B - Statistics and Probability

• create graphical representations of data on a number line (including dot plots, histograms, and box plots) (CCGPS) (MAL1_B2012-15/MCC9-12.ID.1)

• use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range) of two or more different data sets (CCGPS) (MAL1_B2012-16/MCC9-12.ID.2)
Mathematics

B - Statistics and Probability (continued)

- interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers) (CCGPS) (MAL1_B2012-17/MCC9-12.ID.3)
- interpret relative frequencies in context of the data including joint, marginal, and conditional relative frequencies (CCGPS) (MAL1_B2012-18/MCC9-12.ID.5)
- summarize categorical data for two categories in two-way frequency tables and recognize possible associations and trends in the data (CCGPS) (MAL1_B2012-19/MCC9-12.ID.5)
- represent data on two quantitative variables on a scatter plot and describe how the variables are related (CCGPS) (MAL1_B2012-20/MCC9-12.ID.6)
- fit a function to data; use functions fitted to data to solve problems in the context of the data emphasizing linear and exponential models (CCGPS) (MAL1_B2012-21/MCC9-12.ID.6_a)
- assess informally the fit of a function by plotting and analyzing residuals (CCGPS) (MAL1_B2012-22/MCC9-12.ID.6_b)
- fit a linear function for a scatter plot that suggests a linear association (CCGPS) (MAL1_B2012-23/MCC9-12.ID.6_c)
- determine and interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data (CCGPS) (MAL1_B2012-24/MCC9-12.ID.7)
- compute (using technology) and interpret the correlation coefficient of a linear fit (CCGPS) (MAL1_B2012-25/MCC9-12.ID.8)
- distinguish between correlation and causation in interpreting linear models (CCGPS) (MAL1_B2012-26/MCC9-12.ID.9)

C - Geometry

- use precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc (CCGPS) (MAL1_C2012-27/MCC9-12.CO.1)
- represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs; compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch) (CCGPS) (MAL1_C2012-28/MCC9-12.CO.2)
- employ properties of rectangles, parallelograms, trapezoids, and regular polygons to describe rotations and reflections that map a polygon onto itself (CCGPS) (MAL1_C2012-29/MCC9-12.CO.3)
- explain, apply, and experimentally verify definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments (CCGPS) (MAL1_C2012-30/MCC9-12.CO.4)
- given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software; specify a sequence of transformations that will carry a given figure onto another (CCGPS) (MAL1_C2012-31/MCC9-12.CO.5)
- prove simple geometric theorems algebraically using coordinates (CCGPS) (MAL1_C2012-32/MCC9-12.GPE.4)
- prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point) (CCGPS) (MAL1_C2012-33/MCC9-12.GPE.5)
- determine the point on a line segment between two given points that divides the segment in a given ratio (CCGPS) (MAL1_C2012-34/MCC9-12.GPE.6)
- compute perimeters of polygons and areas of triangles and rectangles using coordinates including the use of the distance formula (CCGPS) (MAL1_C2012-35/MCC9-12.GPE.7)

D - Functions

- understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range [(e.g., if f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x; the graph of f is the graph of the equation y = f(x). (Draw examples from linear and exponential functions.))] (CCGPS) (MAL1_D2012-36/MCC9-12.IF.1)
- evaluate functions for inputs in their domains using function notation and interpret statements that use function notation in terms of a context (Draw examples from linear and exponential functions) (CCGPS) (MAL1_D2012-37/MCC9-12.IF.2)
- recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers (e.g., the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1) for n > 1; draw connection to F.BF.2, which requires students to write arithmetic and geometric sequences) (CCGPS) (MAL1_D2012-38/MCC9-12.IF.3)
D – Functions (continued)

• interpret key features of graphs and tables for a function that models a relationship between two quantities in terms of the quantities for a function that models a relationship between two quantities, and sketch graphs showing key features given a verbal description of the relationship [(Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior) (Focus on linear and exponential functions.)] (CCGPS) (MAL1_D2012-39/MCC9-12.IF.4)

• relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes (Focus on linear and exponential functions.) (CCGPS) (MAL1_D2012-40/MCC9-12.IF.5)

• calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval; estimate the rate of change from a graph (Focus on linear functions and intervals for exponential functions whose domain is a subset of the integers) (CCGPS) (MAL1_D2012-41/MCC9-12.IF.6)

• graph functions expressed symbolically and show key features of the graph by hand in simple cases and using technology for more complicated cases (Focus on linear and exponential functions. Include comparisons of two functions presented algebraically) (CCGPS) (MAL1_D2012-42/MCC9-12.IF.7)

• graph linear functions and show intercepts, maxima, and minima (CCGPS) (MAL1_D2012-43/MCC9-12.IF.7_a)

• graph exponential functions showing intercepts and end behavior (CCGPS) (MAL1_D2012-44/MCC9-12.IF.7_e)

• compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions) (e.g., given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum) (CCGPS) (MAL1_D2012-45/MCC9-12.IF.9)

• write a function that describes a relationship between two quantities (Limit a linear and exponential functions.) (CCGPS) (MAL1_D2012-46/MCC9-12.BF.1)

• determine an explicit expression, a recursive process, or steps for calculation from a context (Limit to linear and exponential functions.) (CCGPS) (MAL1_D2012-47/MCC9-12.BF.1_a)

• combine standard function types using arithmetic operations (Limit to linear and exponential functions.) (CCGPS) (MAL1_D2012-48/MCC9-12.BF.1_b)

• write arithmetic and geometric sequences both recursively and with an explicit formula; use them to model situations, and translate between the two forms (CCGPS) (MAL1_D2012-49/MCC9-12.BF.2)

• identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs; experiment with cases and illustrate an explanation of the effects on the graph using technology (include recognizing even and odd functions from their graphs and algebraic expressions for them; focus on vertical translations of graphs of linear and exponential functions; relate the vertical translation of a linear function to its y-intercept) (CCGPS) (MAL1_D2012-50/MCC9-12.BF.3)

• distinguish between situations that can be modeled with linear functions and with exponential functions (CCGPS) (MAL1_D2012-51/MCC9-12.LE.1)

• prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals (CCGPS) (MAL1_D2012-52/MCC9-12.LE.1_a)

• recognize situations in which one quantity changes at a constant rate per unit interval relative to another (CCGPS) (MAL1_D2012-53/MCC9-12.LE.1_b)

• recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another (CCGPS) (MAL1_D2012-54/MCC9-12.LE.1_c)

• construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table) (CCGPS) (MAL1_D2012-55/MCC9-12.LE.2)

• show using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly (CCGPS) (MAL1_D2012-56/MCC9-12.LE.3)

• interpret the parameters in a linear or exponential function in terms of a context. (Limit exponential functions to those of the form f(a) = bª + k) (CCGPS) (MAL1_D2012-57/MCC9-12.LE.5)
Mathematics

E - Numbers and Quantity
• use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas (CCGPS) (MAL1_E2012-58/MCC9-12.Q.1)
• choose and interpret the scale and the origin in graphs and data displays (CCGPS) (MAL1_E2012-59/MCC9-12.Q.1)
• determine appropriate quantities for the purpose of descriptive modeling (CCGPS) (MAL1_E2012-60/MCC9-12.Q.2)
• choose a level of accuracy appropriate to limitations on measurement when reporting quantities (CCGPS) (MAL1_E2012-61/MCC9-12.Q.3)

ACCELERATED ALGEBRA I CC

A - Algebra
• interpret expressions that represent a quantity in terms of its context (Emphasis on linear expressions and exponential expressions with integer exponents.) (CCGPS) (MAAC_A2012-1/MCC9-12.SSE.1)
• interpret parts of an expression such as terms, factors, and coefficients (Emphasis on linear expressions and exponential expressions with integer exponents.) (CCGPS) (MAAC_A2012-2/MCC9-12.SSE.1_a)
• interpret complicated expressions by viewing one or more of their parts as a single entity (Emphasis on linear expressions and exponential expressions with integer exponents.) (CCGPS) (MAAC_A2012-3/MCC9-12.SSE.1_b)
• create equations and inequalities in one variable and use them to solve problems (Include equations arising from linear and exponential functions) (CCGPS) (MAAC_A2012-4/MCC9-12.CED.1)
• create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales (Limit to linear and exponential equations and in the case of exponential equations, limit to situations requiring evaluation of exponential functions at integer inputs) (CCGPS) (MAAC_A2012-5/MCC9-12.CED.2)
• represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context (Limit to linear equations and inequalities) (CCGPS) (MAAC_A2012-6/MCC9-12.CED.3)
• rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations (Limit to formulas with a linear focus) (CCGPS) (MAAC_A2012-7/MCC9-12.CED.4)
• solve linear equations and inequalities in one variable, including equations with coefficients represented by letters (Extend earlier work with solving linear equations to solving linear inequalities in one variable and to solving literal equations that are linear in the variable being solved for. Include simple exponential equations that rely only on application of the laws of exponents, such as $5^x = 125$ or $2^x = 1/16$) (CCGPS) (MAAC_A2012-8/MCC9-12.REI.3)
• solve a system of two equations in two variables using elimination and substitution methods (Limit to linear systems) (CCGPS) (MAAC_A2012-9/MCC9-12.REI.5)
• solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables (CCGPS) (MAAC_A2012-10/MCC9-12.REI.6)
• demonstrate that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line) (CCGPS) (MAAC_A2012-11/MCC9-12.REI.10)
• explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution; construct a viable argument to justify a solution method. (Students should focus on and master linear equations and be able to extend and apply their reasoning to other types of equations in future courses.) (CCGPS) (MAAC_A2012-12/MCC9-12.REI.11)
• explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions (CCGPS) (MAAC_A2012-13/MCC9-12.REI.11)
• graph the solutions to a linear inequality in two variables as a half plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes (CCGPS) (MAAC_A2012-14/MCC9-12.REI.12)
B - Statistics and Probability

- create graphical representations of data on a number line (including dot plots, histograms, and box plots) (CCGPS) (MAAC_B2012-15/MCC9-12.ID.1)
- use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range) of two or more different data sets (CCGPS) (MAAC_B2012-16/MCC9-12.ID.2)
- interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers) (CCGPS) (MAAC_B2012-17/MCC9-12.ID.3)
- interpret relative frequencies in context of the data including joint, marginal, and conditional relative frequencies (CCGPS) (MAAC_B2012-18/MCC9-12.ID.5)
- summarize categorical data for two categories in two way frequency tables and recognize possible associations and trends in the data (CCGPS) (MAAC_B2012-19/MCC9-12.ID.5)
- represent data on two quantitative variables on a scatter plot and describe how the variables are related (CCGPS) (MAAC_B2012-20/MCC9-12.ID.6)
- fit a function to data; use functions fitted to data to solve problems in the context of the data emphasizing linear and exponential models (CCGPS) (MAAC_B2012-21/MCC9-12.ID.6_a)
- assess informally the fit of a function by plotting and analyzing residuals (CCGPS) (MAAC_B2012-22/MCC9-12.ID.6_b)
- fit a linear function for a scatter plot that suggests a linear association (CCGPS) (MAAC_B2012-23/MCC9-12.ID.6_c)
- determine and interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data (CCGPS) (MAAC_B2012-24/MCC9-12.ID.7)
- compute (using technology) and interpret the correlation coefficient of a linear fit (CCGPS) (MAAC_B2012-25/MCC9-12.ID.8)
- distinguish between correlation and causation in interpreting linear models (CCGPS) (MAAC_B2012-26/MCC9-12.ID.9)

C - Geometry

- use precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc (CCGPS) (MAAC_C2012-27/MCC9-12.CO.1)
- represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs; compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch) (CCGPS) (MAAC_C2012-28/MCC9-12.CO.2)
- employ properties of rectangles, parallelograms, trapezoids, and regular polygons to describe rotations and reflections that map a polygon onto itself (CCGPS) (MAAC_C2012-29/MCC9-12.CO.3)
- explain, apply and experimentally verify definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments (CCGPS) (MAAC_C2012-30/MCC9-12.CO.4)
- given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software; specify a sequence of transformations that will carry a given figure onto another (CCGPS) (MAAC_C2012-31/MCC9-12.CO.5)
- use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent (CCGPS) (MAAC_C2012-32/MCC9-12.CO.6)
- demonstrate that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent using the definition of congruence in terms of rigid motions (CCGPS) (MAAC_C2012-33/MCC9-12.CO.7)
- explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions (CCGPS) (MAAC_C2012-34/MCC9-12.CO.8)
- prove theorems about lines and angles to include those regarding vertical angles, parallel lines cut by a transversal, and that points on a perpendicular bisector of a line segment are exactly those equidistant from the segment’s endpoints (CCGPS) (MAAC_C2012-35/MCC9-12.CO.9)
- prove theorems about triangles to include sum of the measures of interior angles of a triangle, base angles of an isosceles triangle, midsegment theorem, and centroids (CCGPS) (MAAC_C2012-36/MCC9-12.CO.10)
C - Geometry (continued)

- prove theorems about parallelograms (Theorems include opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals) (CCGPS) (MAAC_C2012-37/MCC9-12.CO.11)
- perform the following constructions using compass and straightedge, appropriate technology or other means: copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment, constructing a line parallel to a given line through a point not on the line (CCGPS) (MAAC_C2012-38/MCC9-12.CO.12)
- construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle (CCGPS) (MAAC_C2012-39/MCC9-12.CO.13)
- verify experimentally the properties of dilations given by a center and a scale factor (CCGPS) (MAAC_C2012-40/MCC9-12.SRT.1)
- recognize that a dilation takes a line not passing through the center of the dilation to a parallel line and leaves a line passing through the center unchanged (CCGPS) (MAAC_C2012-41/MCC9-12.SRT.1.a)
- recognize that the dilation of a line segment is longer or shorter in the ratio given by the scale factor (CCGPS) (MAAC_C2012-42/MCC9-12.SRT.1_b)
- given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides (CCGPS) (MAAC_C2012-43/MCC9-12.SRT.2)
- apply the properties of similarity transformations to establish the AA criterion for two triangles to be similar (CCGPS) (MAAC_C2012-44/MCC9-12.SRT.3)
- prove and apply theorems about triangles including a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean theorem proved using triangle similarity (CCGPS) (MAAC_C2012-45/MCC9-12.SRT.4)
- apply congruence and similarity criteria to solve problems and prove relationships in geometric figures (CCGPS) (MAAC_C2012-46/MCC9-12.SRT.5)
- demonstrate that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles (CCGPS) (MAAC_C2012-47/MCC9-12.SRT.6)
- explain and apply relationships between the sine and cosine of complementary angles (CCGPS) (MAAC_C2012-48/MCC9-12.SRT.7)
- solve application problems using the trigonometric ratios and the Pythagorean theorem (CCGPS) (MAAC_C2012-49/MCC9-12.SRT.8)
- prove that all circles are similar (CCGPS) (MAAC_C2012-50/MCC9-12.C.1)
- identify and describe relationships among inscribed angles, radii, and chords (include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle) (CCGPS) (MAAC_C2012-51/MCC9-12.C.2)
- construct the inscribed and circumscribed circles of a triangle (CCGPS) (MAAC_C2012-52/MCC9-12.C.3)
- prove properties of angles for a quadrilateral inscribed in a circle (CCGPS) (MAAC_C2012-53/MCC9-12.C.3)
- construct a tangent line from a point outside a given circle to the circle (CCGPS) (MAAC_C2012-54/MCC9-12.C.4)
- derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius (CCGPS) (MAAC_C2012-55/MCC9-12.C.5)
- define the radian measure of an angle as the constant of proportionality of the length of an intercepted arc and the radius of the circle (CCGPS) (MAAC_C2012-56/MCC9-12.C.5)
- derive the formula for the area of a sector (CCGPS) (MAAC_C2012-57/MCC9-12.C.5)
- prove simple geometric theorems algebraically using coordinates (CCGPS) (MAAC_C2012-58/MCC9-12.GPE.4)
- prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point) (CCGPS) (MAAC_C2012-59/MCC9-12.GPE.5)
- determine the point on a line segment between two given points that divides the segment in a given ratio (CCGPS) (MAAC_C2012-60/MCC9-12.GPE.6)
- compute perimeters of polygons and areas of triangles and rectangles using coordinates including the use of the distance formula (CCGPS) (MAAC_C2012-61/MCC9-12.GPE.7)
Mathematics

**C - Geometry (continued)**

- explain informally the formulas for circumference and area of a circle, volume of a cylinder, pyramid and cone, using dissection arguments, Cavalieri’s principle, and informal limit arguments (CCGPS) (MAAC_C2012-62/MCC9-12.GMD.1)
- explain informally Cavalieri’s principle for the formulas for the volume of a sphere and other solid figures (CCGPS) (MAAC_C2012-63/MCC9-12.GMD.2)
- use volume formulas for cylinders, pyramids, cones, and spheres to solve problems (CCGPS) (MAAC_C2012-64/MCC9-12.GMD.3)

**D - Functions**

- understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range (e.g., if f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x; the graph of f is the graph of the equation y = f(x). (Draw examples from linear and exponential functions.)) (CCGPS) (MAAC_D2012-65/MCC9-12.IF.1)
- evaluate functions for inputs in their domains using function notation and interpret statements that use function notation in terms of a context (Draw examples from linear and exponential functions) (CCGPS) (MAAC_D2012-66/MCC9-12.IF.2)
- recognize sequences both explicit and recursive as functions with domains that are whole numbers (e.g., the Fibonacci sequence is defined recursively by f(0) = f(1) = 1, f(n+1) = f(n) + f(n-1) for n > 1; draw connection to F.BF.2, which requires students to write arithmetic and geometric sequences) (CCGPS) (MAAC_D2012-67/MCC9-12.IF.3)
- interpret key features of graphs and tables for a function that models a relationship between two quantities in terms of the quantities for a function that models a relationship between two quantities, and sketch graphs showing key features given a verbal description of the relationship [Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior] (Focus on linear and exponential functions.) (CCGPS) (MAAC_D2012-68/MCC9-12.IF.4)
- relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes (Focus on linear and exponential functions.) (CCGPS) (MAAC_D2012-69/MCC9-12.IF.5)
- calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval; estimate the rate of change from a graph (Focus on linear functions and intervals for exponential functions whose domain is a subset of the integers) (CCGPS) (MAAC_D2012-70/MCC9-12.IF.6)
- graph functions expressed symbolically and show key features of the graph by hand in simple cases and using technology for more complicated cases (Focus on linear and exponential functions. Include comparisons of two functions presented algebraically) (CCGPS) (MAAC_D2012-71/MCC9-12.IF.7)
- graph linear functions and show intercepts, maxima, and minima (CCGPS) (MAAC_D2012-72/MCC9-12.IF.7_a)
- graph exponential functions showing intercepts and end behavior (CCGPS) (MAAC_D2012-73/MCC9-12.IF.7_e)
- compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions) (e.g., given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum) (CCGPS) (MAAC_D2012-74/MCC9-12.IF.9)
- write a function that describes a relationship between two quantities (Limit to linear and exponential functions.) (CCGPS) (MAAC_D2012-75/MCC9-12.BF.1)
- determine an explicit expression, a recursive process, or steps for calculation from a context (Limit to linear and exponential functions.) (CCGPS) (MAAC_D2012-76/MCC9-12.BF.1_a)
- combine standard function types using arithmetic operations (Limit to linear and exponential functions.) (CCGPS) (MAAC_D2012-77/MCC9-12.BF.1_b)
- write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms (CCGPS) (MAAC_D2012-78/MCC9-12.BF.2)
- identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs; experiment with cases and illustrate an explanation of the effects on the graph using technology (Include recognizing even and odd functions from their graphs and algebraic expressions for them. Focus on vertical translations of graphs of linear and exponential functions. Relate the vertical translation of a linear function to its y-intercept.) (CCGPS) (MAAC_D2012-79/MCC9-12.BF.3)
D - Functions (continued)

- distinguish between situations that can be modeled with linear functions and with exponential functions (CCGPS) (MAAC_D2012-80/MCC9-12.LE.1)
- prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals (CCGPS) (MAAC_D2012-81/MCC9-12.LE.1_a)
- recognize situations in which one quantity changes at a constant rate per unit interval relative to another (CCGPS) (MAAC_D2012-82/MCC9-12.LE.1_b)
- recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another (CCGPS) (MAAC_D2012-83/MCC9-12.LE.1_c)
- construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table) (CCGPS) (MAAC_D2012-84/MCC9-12.LE.1)
- show using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly (CCGPS) (MAAC_D2012-85/MCC9-12.LE.3)
- interpret the parameters in a linear or exponential function in terms of a context (Limit exponential functions to those of the form \( f(a) = b^a + k \)) (CCGPS) (MAAC_D2012-86/MCC9-12.LE.5)

E - Numbers and Quantity

- use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas (CCGPS) (MAAC_E2012-87/MCC9-12.Q.1)
- choose and interpret the scale and the origin in graphs and data displays (CCGPS) (MAAC_E2012-88/MCC9-12.Q.1)
- determine appropriate quantities for the purpose of descriptive modeling (CCGPS) (MAAC_E2012-89/MCC9-12.Q.2)
- choose a level of accuracy appropriate to limitations on measurement when reporting quantities (CCGPS) (MAAC_E2012-90/MCC9-12.Q.3)

INTEGRATED ALGEBRA I

A - Process Skills

- use appropriate technology to solve mathematical problems (GPS) (MAM1_A2009-1)
- build new mathematical knowledge through problem-solving (GPS) (MAM1_A2009-2)
- solve problems that arise in mathematics and in other areas (GPS) (MAM1_A2009-3)
- apply and adapt a variety of appropriate strategies to solve problems (GPS) (MAM1_A2009-4)
- monitor and reflect on the process of mathematical problem-solving (GPS) (MAM1_A2009-5)
- recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MAM1_A2009-6)
- make and investigate mathematical conjectures (GPS) (MAM1_A2009-7)
- investigate, develop, and evaluate mathematical arguments and proofs (GPS) (MAM1_A2009-8)
- select and use various types of reasoning and methods of proof (GPS) (MAM1_A2009-9)
- organize and consolidate mathematics thinking (GPS) (MAM1_A2009-10)
- communicate mathematical thinking coherently to peers, teachers, and others (GPS) (MAM1_A2009-11)
- analyze and evaluate the mathematical thinking and strategies of others (GPS) (MAM1_A2009-12)
- use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MAM1_A2009-13)
- recognize and use connections among mathematical ideas (GPS) (MAM1_A2009-14)
- explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MAM1_A2009-15)
- recognize and apply mathematics in contexts outside of mathematics (GPS) (MAM1_A2009-16)
- create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas (GPS) (MAM1_A2009-17)
- select, apply, and translate among mathematical representations to solve problems (GPS) (MAM1_A2009-18)
- use representations to model and interpret physical, social, and mathematical phenomena (GPS) (MAM1_A2009-19)
C - Geometry

- determine the distance between two points (GPS) (MAM1_C2009-20)
- determine the distance between a point and a line (GPS) (MAM1_C2009-21)
- determine the midpoint of a segment (GPS) (MAM1_C2009-22)
- explain the distance formula as an application of the Pythagorean theorem (GPS) (MAM1_C2009-23)
- use the coordinate plane to investigate properties of and verify conjectures related to triangles and quadrilaterals (GPS) (MAM1_C2009-24)
- use conjecture, inductive reasoning, deductive reasoning, counterexamples, and indirect proof as appropriate (GPS) (MAM1_C2009-25)
- explain and use the relationships among a statement and its converse, inverse, and contrapositive (GPS) (MAM1_C2009-26)
- determine the sum of interior and exterior angles in a polygon (GPS) (MAM1_C2009-27)
- use and explain triangle inequality, side-angle inequality, and exterior-angle inequality (GPS) (MAM1_C2009-28)
- use and explain congruence postulates and theorems for triangles (SSS, SAS, ASA, AAS, HL) (GPS) (MAM1_C2009-29)
- use and prove properties of and relationships among special quadrilaterals: parallelogram, rectangle, rhombus, square, trapezoid, and kite (GPS) (MAM1_C2009-30)
- find and use points of concurrency in triangles: incenter, orthocenter, circumcenter, and centroid (GPS) (MAM1_C2009-31)

E - Algebra

- represent functions using function notation (GPS) (MAM1_E2009-32)
- graph the basic functions \( f(x)=x^n \), where \( n=1 \) to \( 3 \), \( f(x)=\sqrt{x} \), \( f(x)=|x| \), and \( f(x)=1/x \) (GPS) (MAM1_E2009-33)
- graph transformations of basic functions including vertical shifts, horizontal shifts, stretches, and shrinks, as well as reflections across the x- and y-axes (GPS) (MAM1_E2009-34)
- investigate and explain the characteristics of a function: domain, range, zeros, intercepts, intervals of increase and decrease, e maximum and minimum values, and end behavior (GPS) (MAM1_E2009-35)
- relate to a given context the characteristics of a function and use graphs and tables to investigate its behavior (GPS) (MAM1_E2009-36)
- recognize sequences as functions with domains that are whole numbers (GPS) (MAM1_E2009-37)
- explore rates of change, comparing constant rates of change (e.g., slope) versus variable rates of change and compare rates of change of linear, quadratic, square root, and other function families (GPS) (MAM1_E2009-38)
- determine graphically and algebraically whether a function has symmetry and whether it is even, odd, or neither (GPS) (MAM1_E2009-39)
- explain how any equation in \( x \) can be interpreted as the equation \( f(x) = g(x) \), and interpret the solutions of the equation as the x-value(s) of the intersection point(s) of the graphs of \( y = f(x) \) and \( y = g(x) \) (GPS) (MAM1_E2009-40)
- simplify algebraic and numeric expressions involving square root (GPS) (MAM1_E2009-41)
- perform operations with square roots (GPS) (MAM1_E2009-42)
- add, subtract, multiply, and divide polynomials (GPS) (MAM1_E2009-43)
- expand binomials using the binomial theorem (GPS) (MAM1_E2009-44)
- add, subtract, multiply, and divide rational expressions (GPS) (MAM1_E2009-45)
- factor expressions by greatest common factor, grouping, trial and error, and special products limited to the following formulas: \((x + y)^2 = x^2 + 2xy + y^2; (x - y)^2 = x^2 - 2xy + y^2, (x + y)(x - y) = x^2 - y^2, (x + a)(x + b) = x^2 + (a + b)x + ab, (x + y)^3 = x^3 + 3x^2y + 3xy^2 + y^3, (x - y)^3 = x^3 - 3x^2y + 3xy^2 - y^3 (GPS) (MAM1_E2009-46)
- use area and volume models for polynomial arithmetic (GPS) (MAM1_E2009-47)
- solve quadratic equations in the form \( ax^2 + bx + c = 0 \), where \( a = 1 \), by using factorization and finding square roots where applicable (GPS) (MAM1_E2009-48)
- solve equations involving radicals such as \( \sqrt{x} + b = c \), using algebraic techniques (GPS) (MAM1_E2009-49)
- use a variety of techniques, including technology, tables and graphs, to solve equations resulting from the investigation of \( x^2 + bx + c = 0 \) (GPS) (MAM1_E2009-50)
- solve simple rational equations that result in linear equations or quadratic equations with leading coefficient of 1 (GPS) (MAM1_E2009-51)
Mathematics

**F - Data Analysis and Probability**
- organize, represent, investigate, interpret, and make inferences from data (GPS) (MAM1_F2009-52)
- apply the addition and multiplication principles of counting (GPS) (MAM1_F2009-53)
- calculate and use simple permutations and combinations (GPS) (MAM1_F2009-54)
- find the probabilities of mutually exclusive events (GPS) (MAM1_F2009-55)
- find the probabilities of dependent events (GPS) (MAM1_F2009-56)
- calculate conditional probabilities (GPS) (MAM1_F2009-57)
- use expected value to predict outcomes (GPS) (MAM1_F2009-58)
- compare summary statistics (mean, median, quartiles and interquartile range) from one sample data distribution to another sample data distribution in describing center and variability of data distributions (GPS) (MAM1_F2009-59)
- compare averages of summary statistics from a large number of samples to the corresponding population parameters (GPS) (MAM1_F2009-60)
- explain how a random sample is used to improve the chance of selecting a representative sample (GPS) (MAM1_F2009-61)
- explore variability of data by determining the mean absolute deviation (the average of the absolute values of the deviations) (GPS) (MAM1_F2009-62)

**G - Reading Across the Curriculum**
- read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary, and to be aware of current research (GPS) (MAM1_G2009-63)

**INTEGRATED GEOMETRY**

**A - Process Skills**
- use appropriate technology to solve mathematical problems (GPS) (MAM2_A2009-1)
- build new mathematical knowledge through problem-solving (GPS) (MAM2_A2009-2)
- solve problems that arise in mathematics and in other areas (GPS) (MAM2_A2009-3)
- apply and adapt a variety of appropriate strategies to solve problems (GPS) (MAM2_A2009-4)
- monitor and reflect on the process of mathematical problem-solving (GPS) (MAM2_A2009-5)
- recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MAM2_A2009-6)
- make and investigate mathematical conjectures (GPS) (MAM2_A2009-7)
- investigate, develop, and evaluate mathematical arguments and proofs (GPS) (MAM2_A2009-8)
- select and use various types of reasoning and methods of proof (GPS) (MAM2_A2009-9)
- organize and consolidate mathematics thinking (GPS) (MAM2_A2009-10)
- communicate mathematical thinking coherently to peers, teachers, and others (GPS) (MAM2_A2009-11)
- analyze and evaluate the mathematical thinking and strategies of others (GPS) (MAM2_A2009-12)
- use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MAM2_A2009-13)
- recognize and use connections among mathematical ideas (GPS) (MAM2_A2009-14)
- explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MAM2_A2009-15)
- recognize and apply mathematics in contexts outside of mathematics (GPS) (MAM2_A2009-16)
- create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas (GPS) (MAM2_A2009-17)
- select, apply, and translate among mathematical representations to solve problems (GPS) (MAM2_A2009-18)
- use representations to model and interpret physical, social, and mathematical phenomena (GPS) (MAM2_A2009-19)

**B - Numbers and Operations**
- write square roots of negative numbers in imaginary form (GPS) (MAM2_B2009-20)
- write complex numbers in the form a + bi (GPS) (MAM2_B2009-21)
B - Numbers and Operations (continued)
- add, subtract, multiply, and divide complex numbers (GPS) (MAM2_B2009-22)
- simplify expressions involving complex numbers (GPS) (MAM2_B2009-23)

C - Geometry
- identify and use special right triangles (GPS) (MAM2_C2009-24)
- determine the lengths of sides of 30° - 60° - 90° triangles (GPS) (MAM2_C2009-25)
- determine the lengths of sides of 45° - 45° - 90° triangles (GPS) (MAM2_C2009-26)
- define and apply sine, cosine, and tangent ratios to right triangles (GPS) (MAM2_C2009-27)
- explain the relationship of the trigonometric ratios for similar triangles (GPS) (MAM2_C2009-28)
- explain the relationship between the trigonometric ratios of complementary angles (GPS) (MAM2_C2009-29)
- solve application problems using the trigonometric ratios (GPS) (MAM2_C2009-30)
- apply properties of chords, tangents, and secants as an application of triangle similarity (GPS) (MAM2_C2009-31)
- apply properties of central, inscribed, and related angles (GPS) (MAM2_C2009-32)
- use the properties of circles to solve problems involving the length of an arc and the area of a sector (GPS) (MAM2_C2009-33)
- justify measurements and relationships in circles using geometric and algebraic properties (GPS) (MAM2_C2009-34)
- use and apply surface area and volume of a sphere (GPS) (MAM2_C2009-35)
- determine the effect on surface area and volume of changing the radius or diameter of a sphere (GPS) (MAM2_C2009-36)

E - Algebra
- investigate and explain characteristics of the greatest integer function (GPS) (MAM2_E2009-37)
- write absolute value functions as piecewise functions (GPS) (MAM2_E2009-38)
- investigate and explain characteristics of a variety of piecewise functions including domain, range, vertex, axis of symmetry, zeros, intercepts, extrema, points of discontinuity, intervals over which the function is constant, intervals of increase and decrease, and rates of change (GPS) (MAM2_E2009-39)
- solve absolute value equations and inequalities analytically, graphically, and by using appropriate technology (GPS) (MAM2_E2009-40)
- generalize properties of exponents to include all integer exponents (GPS) (MAM2_E2009-41)
- investigate and explain characteristics of exponential functions, including domain and range, asymptotes, zeros, intercepts, intervals of increase and decrease, rates of change, and end behavior (GPS) (MAM2_E2009-42)
- graph functions as transformations of \( f(x) = a^x \) (GPS) (MAM2_E2009-43)
- solve simple exponential equations and inequalities analytically, graphically, and by using appropriate technology (GPS) (MAM2_E2009-44)
- use and explain basic exponential functions as models of real phenomena (GPS) (MAM2_E2009-45)
- represent geometric sequences as exponential functions with domains that are whole numbers (GPS) (MAM2_E2009-46)
- interpret the constant ratio in a geometric sequence as the base of the associated exponential function (GPS) (MAM2_E2009-47)
- analyze quadratic functions in the forms \( f(x) = ax^2 + bx + c \) and \( f(x) = a(x-h)^2 + k \) (GPS) (MAM2_E2009-48)
- convert between standard and vertex form (GPS) (MAM2_E2009-49)
- graph quadratic functions as transformations of the function \( f(x) = x^2 \) (GPS) (MAM2_E2009-50)
- investigate and explain characteristics of quadratic functions, including domain, range, vertex, axis of symmetry, zeros, intercepts, extrema, intervals of increase and decrease, and rates of change (GPS) (MAM2_E2009-51)
- investigate arithmetic series and explain various ways of computing their sums (GPS) (MAM2_E2009-52)
- interpret sequences of partial sums of arithmetic series as examples of quadratic functions (GPS) (MAM2_E2009-53)
- solve equations graphically using appropriate technology (GPS) (MAM2_E2009-54)
- find real and complex solutions of equations by factoring, taking square roots, and applying the quadratic formula (GPS) (MAM2_E2009-55)
- analyze the nature of roots using technology and the discriminant (GPS) (MAM2_E2009-56)
E – Algebra (continued)
• solve quadratic inequalities both graphically and algebraically and describe the solutions using linear inequalities (GPS) (MAM2_E2009-57)
• explain the characteristics of functions and their inverses, including one-to-oneness, domain, and range (GPS) (MAM2_E2009-58)
• determine inverses of linear, quadratic, and power functions and functions of the form \( f(x) = \frac{a}{x} \), including the use of restricted domains (GPS) (MAM2_E2009-59)
• compare and contrast the graphs of functions and their inverses (GPS) (MAM2_E2009-60)
• use composition to verify that functions are inverses of each other (GPS) (MAM2_E2009-61)

F - Data Analysis and Probability
• pose a question and collect sample data from two or more different populations (GPS) (MAM2_F2009-62)
• calculate the means and standard deviations of sets of data (GPS) (MAM2_F2009-63)
• use means and standard deviations to compare data sets (GPS) (MAM2_F2009-64)
• compare the means and standard deviations of random samples with the corresponding population parameters, including those population parameters for normal distributions (GPS) (MAM2_F2009-65)
• explain why sample means vary from one sample to the next (GPS) (MAM2_F2009-66)
• explain why the distribution of the sample means has less variability than the population distribution (GPS) (MAM2_F2009-67)
• use population means and standard deviations to make informal inferences (GPS) (MAM2_F2009-68)
• gather and plot data that can be modeled with linear and quadratic functions (GPS) (MAM2_F2009-69)
• find good linear fits to data using simple methods such as the median-median line and “eyeballing” (GPS) (MAM2_F2009-70)
• apply the processes of linear and quadratic regression for curve fitting using appropriate technology (GPS) (MAM2_F2009-71)
• investigate issues that arise when using data to explore the relationship between two variables, including confusion between correlation and causation (GPS) (MAM2_F2009-72)

G - Reading Across the Curriculum
• read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary, and to be aware of current research (GPS) (MAM2_G2009-73)

INTEGRATED ALGEBRA II

A - Process Skills
• use appropriate technology to solve mathematical problems (GPS) (MAM3_A2010-1)
• build new mathematical knowledge through problem solving (GPS) (MAM3_A2010-2)
• solve problems that arise in mathematics and in other contexts (GPS) (MAM3_A2010-3)
• apply and adapt a variety of appropriate strategies to solve problems (GPS) (MAM3_A2010-4)
• monitor and reflect on the process of mathematical problem solving (GPS) (MAM3_A2010-5)
• recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MAM3_A2010-6)
• make and investigate mathematical conjectures (GPS) (MAM3_A2010-7)
• investigate, develop and evaluate mathematical arguments and proofs (GPS) (MAM3_A2010-8)
• select and use various types of reasoning and methods of proof (GPS) (MAM3_A2010-9)
• organize and consolidate mathematics thinking (GPS) (MAM3_A2010-10)
• communicate mathematical thinking coherently to peers, teachers and others (GPS) (MAM3_A2010-11)
• analyze and evaluate the mathematical thinking and strategies of others (GPS) (MAM3_A2010-12)
• use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MAM3_A2010-13)
• recognize and use connections among mathematical ideas (GPS) (MAM3_A2010-14)
• explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MAM3_A2010-15)
• recognize and apply mathematics in contexts outside of mathematics (GPS) (MAM3_A2010-16)
A - Process Skills (continued)
- create and use pictures, manipulatives, models and symbols to organize, record and communicate mathematical ideas (GPS) (MAM3_A2010-17)
- select, apply and translate among mathematical representations to solve problems (GPS) (MAM3_A2010-18)
- use representations to model and interpret physical, social and mathematical phenomena (GPS) (MAM3_A2010-19)

C - Geometry
- find equations of circles (GPS) (MAM3_C2010-20)
- graph a circle given an equation in general form (GPS) (MAM3_C2010-21)
- find the equation of a tangent line to a circle at a given point (GPS) (MAM3_C2010-22)
- solve a system of equations involving a circle and a line (GPS) (MAM3_C2010-23)
- solve a system of equations involving two circles (GPS) (MAM3_C2010-24)
- convert equations of conics by completing the square (GPS) (MAM3_C2010-25)
- graph conic sections, identifying fundamental characteristics (GPS) (MAM3_C2010-26)
- write equations of conic sections (including parabolas, circles, ellipses and hyperbolas) given appropriate information (GPS) (MAM3_C2010-27)
- plot the point $(x, y, z)$ and identify it as a vertex of a rectangular prism (GPS) (MAM3_C2010-28)
- apply the distance formula in 3-space (GPS) (MAM3_C2010-29)
- recognize and use equations of planes and spheres (GPS) (MAM3_C2010-30)

E - Algebra
- graph simple polynomial functions as translations of the function $f(x) = ax^n$ (GPS) (MAM3_E2010-31)
- analyze the effects of the following on the graph of a polynomial function: degree, lead coefficient and multiplicity of real zeros (GPS) (MAM3_E2010-32)
- determine whether a polynomial function has symmetry and whether it is even, odd or neither (GPS) (MAM3_E2010-33)
- investigate and explain characteristics of polynomial functions, including domain and range, intercepts, zeros, relative and absolute extrema, intervals of increase and decrease, and end behavior (GPS) (MAM3_E2010-34)
- define and understand the properties of nth roots (GPS) (MAM3_E2010-35)
- extend properties of exponents to include rational exponents (GPS) (MAM3_E2010-36)
- define logarithmic functions as inverses of exponential functions (GPS) (MAM3_E2010-37)
- use and explain properties of logarithms by extending laws of exponents (GPS) (MAM3_E2010-38)
- investigate and explain characteristics of exponential and logarithmic functions including domain and range, asymptotes, zeros, intercepts, intervals of increase and decrease, and rate of change (GPS) (MAM3_E2010-39)
- graph functions as transformations of $f(x) = a^x$, $f(x) = \log x$, $f(x) = e^x$ and $f(x) = \ln x$ (GPS) (MAM3_E2010-40)
- explore real phenomena related to exponential and logarithmic functions including half-life and doubling time (GPS) (MAM3_E2010-41)
- find real and complex roots of higher degree polynomial equations using the factor theorem, remainder theorem, rational root theorem and fundamental theorem of algebra, incorporating complex and radical conjugates (GPS) (MAM3_E2010-42)
- solve polynomial, exponential and logarithmic equations analytically, graphically and using appropriate technology (GPS) (MAM3_E2010-43)
- solve polynomial, exponential and logarithmic inequalities analytically, graphically and using appropriate technology and represent solution sets of inequalities using interval notation (GPS) (MAM3_E2010-44)
- solve a variety of types of equations by appropriate means choosing among mental calculation, pencil and paper, or appropriate technology (GPS) (MAM3_E2010-45)
- add, subtract, multiply and invert matrices choosing appropriate methods including technology (GPS) (MAM3_E2010-46)
- find the determinants and inverses of two-by-two matrices using pencil and paper, and find inverses of larger matrices using technology (GPS) (MAM3_E2010-47)
- examine the properties of matrices, contrasting them with properties of real numbers (GPS) (MAM3_E2010-48)
E - Algebra (continued)
• represent a system of linear equations as a matrix equation (GPS) (MAM3_E2010-49)
• solve matrix equations using inverse matrices (GPS) (MAM3_E2010-50)
• represent and solve realistic problems using systems of linear equations (GPS) (MAM3_E2010-51)
• solve systems of inequalities in two variables, showing the solutions graphically (GPS) (MAM3_E2010-52)
• represent and solve realistic problems using linear programming (GPS) (MAM3_E2010-53)
• apply matrix representations of vertex-edge graphs to represent realistic situations (GPS) (MAM3_E2010-54)
• use matrices to solve problems that can be represented by vertex-edge graphs (GPS) (MAM3_E2010-55)

F - Data Analysis and Probability
• create probability histograms of discrete random variables, using both experimental and theoretical probabilities (GPS) (MAM3_F2010-56)
• solve problems involving probabilities by interpreting a normal distribution as a probability histogram for a continuous random variable (z-scores are used for a general normal distribution) (GPS) (MAM3_F2010-57)
• determine intervals about the mean that include a given percent of data (GPS) (MAM3_F2010-58)
• determine the probability that a given value falls within a specified interval (GPS) (MAM3_F2010-59)
• estimate how many items in a population fall within a specified interval (GPS) (MAM3_F2010-60)
• compare experimental and observational studies by posing questions and collecting, analyzing and interpreting data (GPS) (MAM3_F2010-61)

G - Reading Across the Curriculum
• read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary and to be aware of current research (GPS) (MAM3_G2010-62)

ACCELERATED INTEGRATED ALGEBRA I

A - Process Skills
• use appropriate technology to solve mathematical problems (GPS) (MAA1_A2009-1)
• build new mathematical knowledge through problem-solving (GPS) (MAA1_A2009-2)
• solve problems that arise in mathematics and in other areas (GPS) (MAA1_A2009-3)
• apply and adapt a variety of appropriate strategies to solve problems (GPS) (MAA1_A2009-4)
• monitor and reflect on the process of mathematical problem-solving (GPS) (MAA1_A2009-5)
• recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MAA1_A2009-6)
• make and investigate mathematical conjectures (GPS) (MAA1_A2009-7)
• investigate, develop, and evaluate mathematical arguments and proofs (GPS) (MAA1_A2009-8)
• select and use various types of reasoning and methods of proof (GPS) (MAA1_A2009-9)
• organize and consolidate mathematics thinking (GPS) (MAA1_A2009-10)
• communicate mathematical thinking coherently to peers, teachers, and others (GPS) (MAA1_A2009-11)
• analyze and evaluate the mathematical thinking and strategies of others (GPS) (MAA1_A2009-12)
• use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MAA1_A2009-13)
• recognize and use connections among mathematical ideas (GPS) (MAA1_A2009-14)
• explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MAA1_A2009-15)
• recognize and apply mathematics in contexts outside of mathematics (GPS) (MAA1_A2009-16)
• create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas (GPS) (MAA1_A2009-17)
• select, apply, and translate among mathematical representations to solve problems (GPS) (MAA1_A2009-18)
• use representations to model and interpret physical, social, and mathematical phenomena (GPS) (MAA1_A2009-19)
Mathematics

B - Numbers and Operations
• write square roots of negative numbers in imaginary form (GPS) (MAA1_B2009-20)
• write complex numbers in the form a + bi (GPS) (MAA1_B2009-21)
• add, subtract, multiply, and divide complex numbers (GPS) (MAA1_B2009-22)
• simplify expressions involving complex numbers (GPS) (MAA1_B2009-23)

C - Geometry
• investigate properties of geometric figures in the coordinate plane (GPS) (MAA1_C2009-24)
• determine the distance between two points (GPS) (MAA1_C2009-25)
• determine the distance between a point and a line (GPS) (MAA1_C2009-26)
• determine the midpoint of a segment (GPS) (MAA1_C2009-27)
• show the distance formula as an application of the Pythagorean theorem (GPS) (MAA1_C2009-28)
• use the coordinate plane to investigate properties of and verify conjectures related to triangles and quadrilaterals (GPS) (MAA1_C2009-29)
• use conjecture, inductive reasoning, deductive reasoning, counterexamples, and indirect proof as appropriate (GPS) (MAA1_C2009-30)
• apply and use the relationships among a statement and its converse, inverse, and contrapositive (GPS) (MAA1_C2009-31)
• discover, prove, and apply properties of triangles, quadrilaterals, and other polygons (GPS) (MAA1_C2009-32)
• determine the sum of interior and exterior angles in a polygon (GPS) (MAA1_C2009-33)
• use and explain triangle inequality, side-angle inequality, and exterior-angle inequality (GPS) (MAA1_C2009-34)
• use congruence postulates and theorems for triangles (SSS, SAS, ASA, AAS, HL) (GPS) (MAA1_C2009-35)
• use and prove properties of and relationships among special quadrilaterals: parallelogram, rectangle, rhombus, square, trapezoid and kite (GPS) (MAA1_C2009-36)
• find and use points of concurrency in triangles: incenter, orthocenter, circumcenter, and centroid (GPS) (MAA1_C2009-37)
• apply properties of chords, tangents, and secants as an application of triangle similarity (GPS) (MAA1_C2009-38)
• apply properties of central, inscribed, and related angles (GPS) (MAA1_C2009-39)
• use and apply surface area and volume of a sphere (GPS) (MAA1_C2009-42)
• determine the effect on surface area and volume of changing the radius or diameter of a sphere (GPS) (MAA1_C2009-43)

E - Algebra
• explore functions, solve equations, and operate with radical, polynomial, and rational expressions (GPS) (MAA1_E2009-44)
• represent functions using function notation (GPS) (MAA1_E2009-45)
• graph the basic functions f(x)=x^n, where n=1 to 3, f(x)=\sqrt{x}, f(x)=|x|, and f(x)=1/x (GPS) (MAA1_E2009-46)
• graph transformations of basic functions including vertical shifts, horizontal shifts, stretches, and shrinks, as well as reflections across the x- and y-axes (GPS) (MAA1_E2009-47)
• investigate and explain the characteristics of a function: domain, range, zeros, intercepts, intervals of increase and decrease, maximum and minimum values, and end behavior (GPS) (MAA1_E2009-48)
• analyze the characteristics of a function in a given context, and use graphs and tables to investigate its behavior (GPS) (MAA1_E2009-49)
• recognize sequences as functions with domains that are sets of whole numbers (GPS) (MAA1_E2009-50)
• explore rates of change, comparing constant rates of change (e.g., slope) versus variable rates of change and compare rates of change of linear, quadratic, square root, and other function families (GPS) (MAA1_E2009-51)
• determine graphically and algebraically whether a function has symmetry and whether it is even, odd, or neither (GPS) (MAA1_E2009-52)
• analyze any equation in x that can be interpreted as the equation f(x)=g(x), and then interpret the solutions of the equation as the x-value(s) of the intersection point(s) of the graphs of y = f(x) and y = g(x) (GPS) (MAA1_E2009-53)
E - Algebra (continued)

- simplify algebraic and numeric expressions involving square root (GPS) (MAA1_E2009-54)
- perform operations with square roots (GPS) (MAA1_E2009-55)
- add, subtract, multiply, and divide polynomials (GPS) (MAA1_E2009-56)
- add, subtract, multiply, and divide rational expressions (GPS) (MAA1_E2009-57)
- factor expressions by greatest common factor, grouping, trial and error, and special products limited to the following formulas: \( (x + y)^2 = x^2 + 2xy + y^2; (x - y)^2 = x^2 - 2xy + y^2; (x + y)(x - y) = x^2 - y^2; (x + a)(x + b) = x^2 + (a + b)x + ab; (x + y)^3 = x^3 + 3x^2y + 3xy^2 + y^3; (x - y)^3 = x^3 - 3x^2y + 3xy^2 - y^3 \) (GPS) (MAA1_E2009-58)
- use area and volume models for polynomial arithmetic (GPS) (MAA1_E2009-59)
- solve equations involving radicals such as \( \sqrt{x + b} = c \) (MAA1_E2009-60)
- solve simple rational equations that result in linear equations or quadratic equations with leading coefficient of 1 (MAA1_E2009-61)
- analyze quadratic functions in the forms \( f(x) = ax^2 + bx + c \) and \( f(x) = a(x-h)^2 + k \) (GPS) (MAA1_E2009-62)
- graph quadratic functions as transformations of the function \( f(x) = x^2 \) (GPS) (MAA1_E2009-64)
- investigate and explain characteristics of quadratic functions, including domain, range, vertex, axis of symmetry, zeros, intercepts, extrema, intervals of increase and decrease, and rates of change (GPS) (MAA1_E2009-65)
- investigate arithmetic series and various ways of computing their sums (GPS) (MAA1_E2009-66)
- explore sequences of partial sums of arithmetic series as examples of quadratic functions (GPS) (MAA1_E2009-67)
- solve quadratic equations and inequalities in one variable (GPS) (MAA1_E2009-68)
- solve quadratic equations and inequalities graphically using appropriate technology (GPS) (MAA1_E2009-69)
- find real and complex solutions of quadratic equations by factoring, taking square roots, and applying the quadratic formula (GPS) (MAA1_E2009-70)
- analyze the nature of roots using technology and the discriminant (GPS) (MAA1_E2009-71)
- solve quadratic inequalities both graphically and algebraically and describe the solutions using linear inequalities (GPS) (MAA1_E2009-72)
- investigate step and piecewise functions, including greatest integer and absolute value functions (GPS) (MAA1_E2009-73)
- write absolute value functions as piecewise functions (GPS) (MAA1_E2009-74)
- investigate and explain characteristics of a variety of piecewise functions including domain, range, vertex, axis of symmetry, zeros, intercepts, extrema, points of discontinuity, intervals over which the function is constant, intervals of increase and decrease, and rates of change (GPS) (MAA1_E2009-75)
- solve absolute value equations and inequalities analytically, graphically, and by using appropriate technology (GPS) (MAA1_E2009-76)

F - Data Analysis and Probability

- apply the addition and multiplication principles of counting (GPS) (MAA1_F2009-77)
- calculate and use simple permutations and combinations (GPS) (MAA1_F2009-78)
- find the probabilities of mutually exclusive events (GPS) (MAA1_F2009-79)
- find the probabilities of dependent and independent events (GPS) (MAA1_F2009-80)
- calculate conditional probabilities (GPS) (MAA1_F2009-81)
- use expected value to predict outcomes (GPS) (MAA1_F2009-82)
- compare summary statistics (mean, median, quartiles, and interquartile range) from one sample data distribution to another sample data distribution in describing center and variability of the data distributions (GPS) (MAA1_F2009-83)
- compare the averages of the summary statistics from a large number of samples to the corresponding population parameters (GPS) (MAA1_F2009-84)
- explain how a random sample is used to improve the chance of selecting a representative sample (GPS) (MAA1_F2009-85)
- explore variability of data by determining the mean absolute deviation (the average of the absolute values of the deviations) (GPS) (MAA1_F2009-86)
**Mathematics**

**F - Data Analysis and Probability (continued)**
- determine an algebraic model to quantify the association between two quantitative variables (GPS) (MAA1_F2009-87)
- gather and plot data that can be modeled with linear and quadratic functions (GPS) (MAA1_F2009-88)
- examine the issues of curve fitting by finding good linear fits to data using simple methods such as the median-median line and “eyeballing” (GPS) (MAA1_F2009-89)
- apply the processes of linear and quadratic regression for curve fitting using appropriate technology (GPS) (MAA1_F2009-90)

**G - Reading Across the Curriculum**
- read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary, and to be aware of current research (GPS) (MAA1_G2009-91)

**ACCELERATED INTEGRATED GEOMETRY**

**A - Process Skills**
- use appropriate technology to solve mathematical problems (GPS) (MAA2_A2009-1)
- build new mathematical knowledge through problem-solving (GPS) (MAA2_A2009-2)
- solve problems that arise in mathematics and in other areas (GPS) (MAA2_A2009-3)
- apply and adapt a variety of appropriate strategies to solve problems (GPS) (MAA2_A2009-4)
- monitor and reflect on the process of mathematical problem-solving (GPS) (MAA2_A2009-5)
- recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MAA2_A2009-6)
- make and investigate mathematical conjectures (GPS) (MAA2_A2009-7)
- investigate, develop, and evaluate mathematical arguments and proofs (GPS) (MAA2_A2009-8)
- select and use various types of reasoning and methods of proof (GPS) (MAA2_A2009-9)
- organize and consolidate mathematics thinking (GPS) (MAA2_A2009-10)
- communicate mathematical thinking coherently to peers, teachers, and others (GPS) (MAA2_A2009-11)
- analyze and evaluate the mathematical thinking and strategies of others (GPS) (MAA2_A2009-12)
- use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MAA2_A2009-13)
- recognize and use connections among mathematical ideas (GPS) (MAA2_A2009-14)
- explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MAA2_A2009-15)
- recognize and apply mathematics in contexts outside of mathematics (GPS) (MAA2_A2009-16)
- create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas (GPS) (MAA2_A2009-17)
- select, apply, and translate among mathematical representations to solve problems (GPS) (MAA2_A2009-18)
- use representations to model and interpret physical, social, and mathematical phenomena (GPS) (MAA2_A2009-19)

**C - Geometry**
- identify and use special right triangles (GPS) (MAA2_C2009-20)
- determine the lengths of sides of 30° - 60° - 90° triangles (GPS) (MAA2_C2009-21)
- determine the lengths of sides of 45° - 45° - 90° triangles (GPS) (MAA2_C2009-22)
- use and apply the relationship of the trigonometric ratios for similar triangles (GPS) (MAA2_C2009-23)
- explain the relationship between the trigonometric ratios of complementary angles (GPS) (MAA2_C2009-24)
- solve application problems using the trigonometric ratios (GPS) (MAA2_C2009-25)
- find equations of circles (GPS) (MAA2_C2009-26)
- graph a circle given an equation in general form (GPS) (MAA2_C2009-27)
- find the equation of a tangent line to a circle at a given point (GPS) (MAA2_C2009-28)
- solve a system of equations involving a circle and a line (GPS) (MAA2_C2009-29)
- solve a system of equations involving two circles (GPS) (MAA2_C2009-30)
Mathematics

C – Geometry (continued)

- recognize, analyze, and graph the equations of the conic sections (parabolas, circles, ellipses, and hyperbolas) (GPS) (MAA2_C2009-31)
- convert equations of conics by completing the square (GPS) (MAA2_C2009-32)
- graph conic sections, identifying fundamental characteristics (GPS) (MAA2_C2009-33)
- write equations of conic sections given appropriate information (GPS) (MAA2_C2009-34)
- plot the point (x, y, z) and understand it as a vertex of a rectangular prism (GPS) (MAA2_C2009-35)
- apply the distance formula in 3-space (GPS) (MAA2_C2009-36)
- recognize and understand equations of planes and spheres (GPS) (MAA2_C2009-37)

E - Algebra

- extend properties of exponents to include all integer exponents (GPS) (MAA2_E2009-38)
- investigate and explain characteristics of exponential functions, including domain and range, asymptotes, zeros, intercepts, intervals of increase and decrease, rates of change, and end behavior (GPS) (MAA2_E2009-39)
- graph functions as transformations of f(x) = a^x (GPS) (MAA2_E2009-40)
- solve simple exponential equations and inequalities analytically, graphically, and by using appropriate technology (GPS) (MAA2_E2009-41)
- use basic exponential functions as models of real phenomena (GPS) (MAA2_E2009-42)
- explain that geometric sequences are exponential functions with domains that are sets of whole numbers (GPS) (MAA2_E2009-43)
- interpret the constant ratio in a geometric sequence as the base of the associated exponential function (GPS) (MAA2_E2009-44)
- analyze the characteristics of functions and their inverses, including one-to-oneness, domain, and range (GPS) (MAA2_E2009-45)
- determine inverses of linear, quadratic, and power functions and functions of the form f(x) = a/x, including the use of restricted domains (GPS) (MAA2_E2009-46)
- analyze the graphs of functions and their inverses (GPS) (MAA2_E2009-47)
- use composition to verify that functions are inverses of each other (GPS) (MAA2_E2009-48)
- graph simple polynomial functions as translations of the function f(x) = ax^n (GPS) (MAA2_E2009-49)
- describe the effects of the following on the graph of a polynomial function: degree, lead coefficient, and multiplicity of real zeros (GPS) (MAA2_E2009-50)
- determine whether a polynomial function has symmetry and whether it is even, odd, or neither (GPS) (MAA2_E2009-51)
- investigate and explain characteristics of polynomial functions, including domain and range, intercepts, zeros, relative and absolute extreme, intervals of increase and decrease, and end behavior (GPS) (MAA2_E2009-52)
- define and understand the properties of nth roots (GPS) (MAA2_E2009-53)
- extend properties of exponents to include rational exponents (GPS) (MAA2_E2009-54)
- define logarithmic functions as inverses of exponential functions (GPS) (MAA2_E2009-55)
- apply properties of logarithms by extending laws of exponents (GPS) (MAA2_E2009-56)
- investigate and explain characteristics of exponential and logarithmic functions including domain and range, asymptotes, zeros, intercepts, intervals of increase and decrease, and rate of change (GPS) (MAA2_E2009-57)
- graph functions as transformations of f(x) = a^x, f(x) = log_a x, f(x) = e^x, f(x) = ln x (GPS) (MAA2_E2009-58)
- explore real phenomena related to exponential and logarithmic functions including half-life and doubling time (GPS) (MAA2_E2009-59)
- find real and complex roots of higher degree polynomial equations using the factor theorem, remainder theorem, rational root theorem, and fundamental theorem of algebra, incorporating complex and radical conjugates (GPS) (MAA2_E2009-60)
- solve polynomial, exponential, and logarithmic equations analytically, graphically, and using appropriate technology (GPS) (MAA2_E2009-61)
- solve polynomial, exponential, and logarithmic inequalities analytically, graphically, and using appropriate technology and represent solution sets of inequalities using interval notation (GPS) (MAA2_E2009-62)
- solve a variety of types of equations by appropriate means choosing among mental calculation, pencil and paper, or appropriate technology (GPS) (MAA2_E2009-63)
E – Algebra (continued)

- add, subtract, multiply, and invert matrices choosing appropriate methods, including technology (GPS) (MAA2_E2009-64)
- find the determinants and inverses of two-by-two and three-by-three matrices using pencil and paper, and find inverses of larger matrices using technology (GPS) (MAA2_E2009-65)
- examine the properties of matrices, contrasting them with properties of real numbers (GPS) (MAA2_E2009-66)
- represent a system of linear equations as a matrix equation (GPS) (MAA2_E2009-67)
- solve matrix equations using inverse matrices (GPS) (MAA2_E2009-68)
- represent and solve realistic problems using systems of linear equations (GPS) (MAA2_E2009-69)
- solve systems of inequalities in two variables, showing the solutions graphically (GPS) (MAA2_E2009-70)
- represent and solve realistic problems using linear programming (GPS) (MAA2_E2009-71)
- apply matrix representations of vertex-edge graphs (GPS) (MAA2_E2009-72)
- use graphs to represent realistic situations (GPS) (MAA2_E2009-73)
- use matrices to represent graphs, and solve problems that can be represented by graphs (GPS) (MAA2_E2009-74)

F - Data Analysis and Probability

- pose a question and collect sample data from two or more different populations (GPS) (MAA2_F2009-75)
- calculate and understand the means and standard deviations of sets of data (GPS) (MAA2_F2009-76)
- use means and standard deviations to compare data sets (GPS) (MAA2_F2009-77)
- compare the means and standard deviations of random samples with the corresponding population parameters to conclude that the different sample means vary from one sample to the next and that the distribution of the sample means has less variability than t (GPS) (MAA2_F2009-78)
- create probability histograms of discrete random variables, using both experimental and theoretical probabilities (GPS) (MAA2_F2009-79)
- solve problems involving probabilities by interpreting a normal distribution as a probability histogram for a continuous random variable (z-scores are used for a general normal distribution) (GPS) (MAA2_F2009-80)
- determine intervals about the mean that include a given percent of data (GPS) (MAA2_F2009-81)
- determine the probability that a given value fall within a specified interval (GPS) (MAA2_F2009-82)
- estimate how many items in a population fall within a specified interval (GPS) (MAA2_F2009-83)
- compare experimental and observational studies by posing questions and collecting, analyzing, and interpreting data (GPS) (MAA2_F2009-84)

G - Reading Across the Curriculum

- read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary, and to be aware of current research (GPS) (MAA2_G2009-85)

ACCELERATED INTEGRATED PRECALCULUS

A - Process Skills

- use appropriate technology to solve mathematical problems (GPS) (MAA3_A2009-1)
- build new mathematical knowledge through problem-solving (GPS) (MAA3_A2009-2)
- solve problems that arise in mathematics and in other areas (GPS) (MAA3_A2009-3)
- apply and adapt a variety of appropriate strategies to solve problems (GPS) (MAA3_A2009-4)
- monitor and reflect on the process of mathematical problem-solving (GPS) (MAA3_A2009-5)
- recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MAA3_A2009-6)
- make and investigate mathematical conjectures (GPS) (MAA3_A2009-7)
- investigate, develop, and evaluate mathematical arguments and proofs (GPS) (MAA3_A2009-8)
- select and use various types of reasoning and methods of proof (GPS) (MAA3_A2009-9)
A - Process Skills (continued)

- organize and consolidate mathematics thinking (GPS) (MAA3_A2009-10)
- communicate mathematical thinking coherently to peers, teachers, and others (GPS) (MAA3_A2009-11)
- analyze and evaluate the mathematical thinking and strategies of others (GPS) (MAA3_A2009-12)
- use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MAA3_A2009-13)
- recognize and use connections among mathematical ideas (GPS) (MAA3_A2009-14)
- explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MAA3_A2009-15)
- recognize and apply mathematics in contexts outside of mathematics (GPS) (MAA3_A2009-16)
- create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas (GPS) (MAA3_A2009-17)
- select, apply, and translate among mathematical representations to solve problems (GPS) (MAA3_A2009-18)
- use representations to model and interpret physical, social, and mathematical phenomena (GPS) (MAA3_A2009-19)

E - Algebra

- investigate and explain characteristics of rational functions, including domain, range, zeros, points of discontinuity, intervals of increase and decrease, rates of change, local and absolute extrema, symmetry, asymptotes, and end behavior (GPS) (MAA3_E2009-20)
- find inverses of rational functions, discussing domain, range, symmetry and function composition (GPS) (MAA3_E2009-21)
- solve rational equations and inequalities analytically, graphically and by using appropriate technology (GPS) (MAA3_E2009-22)
- convert between angles measured in degrees and radians, including but not limited to 0°, 30°, 45°, 60°, 90° their multiples and equivalences (GPS) (MAA3_E2009-23)
- apply the six trigonometric functions as functions of general angles in standard position (GPS) (MAA3_E2009-24)
- find values of trigonometric functions using points on the terminal sides of angles in the standard position (GPS) (MAA3_E2009-25)
- apply the six trigonometric functions as functions of arc length on the unit circle (GPS) (MAA3_E2009-26)
- find values of trigonometric functions using the unit circle (GPS) (MAA3_E2009-27)
- apply the six basic trigonometric functions as functions of real numbers (GPS) (MAA3_E2009-28)
- determine characteristics of the graphs of the six basic trigonometric functions (GPS) (MAA3_E2009-29)
- graph transformations of trigonometric functions including changing period, amplitude, phase shift and vertical shift (GPS) (MAA3_E2009-30)
- apply graphs of trigonometric functions in realistic contexts involving periodic phenomena (GPS) (MAA3_E2009-31)
- compare and contrast properties of functions within and across the following types: linear, quadratic, polynomial, power, rational, exponential, logarithmic, trigonometric and piecewise (GPS) (MAA3_E2009-32)
- investigate transformations of functions (GPS) (MAA3_E2009-33)
- investigate characteristics of functions built through sum, difference, product, quotient and composition (GPS) (MAA3_E2009-34)
- establish and utilize trigonometric identities to simplify expressions and verify equivalence statements (GPS) (MAA3_E2009-35)
- solve trigonometric equations both graphically and algebraically over a variety of domains, using technology as appropriate (GPS) (MAA3_E2009-36)
- use the coordinates of a point on the terminal side of an angle to express x as r cos θ and y as r sin θ (GPS) (MAA3_E2009-37)
- apply the law of sines and the law of cosines (GPS) (MAA3_E2009-38)
- verify and apply the trigonometric formula to find the area of a triangle (GPS) (MAA3_E2009-39)
- find values of the inverse sine, inverse cosine and inverse tangent functions using technology as appropriate (GPS) (MAA3_E2009-40)
- determine characteristics of the inverse sine, inverse cosine and inverse tangent functions and their graphs (GPS) (MAA3_E2009-41)
- find and use recursive and explicit formulae for the terms of sequences (GPS) (MAA3_E2009-42)
- analyze and use simple arithmetic and geometric sequences (GPS) (MAA3_E2009-43)
- investigate and analyze limits of sequences (GPS) (MAA3_E2009-44)
E - Algebra (continued)
• use mathematical induction to find and prove formulae for sums of finite series (GPS) (MAA3_E2009-45)
• find and apply the sums of finite and, where appropriate, infinite arithmetic and geometric series (GPS) (MAA3_E2009-46)
• use summation notation to express series (GPS) (MAA3_E2009-47)
• determine geometric series and their limits (GPS) (MAA3_E2009-48)
• represent vectors algebraically and geometrically (GPS) (MAA3_E2009-49)
• convert between vectors expressed using rectangular coordinates and vectors expressed using magnitude and direction (GPS) (MAA3_E2009-50)
• add and subtract vectors and compute scalar multiples of vectors (GPS) (MAA3_E2009-51)
• use vectors to solve realistic problems (GPS) (MAA3_E2009-52)
• represent complex numbers in rectangular and trigonometric form (GPS) (MAA3_E2009-53)
• find products, quotients, powers and roots of complex numbers in rectangular and trigonometric form (GPS) (MAA3_E2009-54)
• describe parametric representations of plane curves (GPS) (MAA3_E2009-55)
• convert between Cartesian and parametric form (GPS) (MAA3_E2009-56)
• graph equations in parametric form showing direction and endpoints where appropriate (GPS) (MAA3_E2009-57)
• express coordinates of points in rectangular and polar form (GPS) (MAA3_E2009-58)
• graph and identify characteristics of simple polar equations including lines, circles, cardioids, limaçons and roses (GPS) (MAA3_E2009-59)

F - Data Analysis and Probability
• organize, represent, investigate, interpret, and make inferences from data, using the central limit theorem and the standard normal distribution (GPS) (MAA3_F2009-60)
• apply the central limit theorem to calculate confidence intervals for a population mean using data from large samples (GPS) (MAA3_F2009-61)
• use sample data and confidence intervals to draw conclusions about populations (GPS) (MAA3_F2009-62)
• use simulation to develop the idea of the central limit theorem (GPS) (MAA3_F2009-63)
• use student-generated data from random samples of 30 or more members to determine the margin of error and confidence interval for a specified level of confidence (GPS) (MAA3_F2009-64)
• use confidence intervals and margins of error to make inferences from data about a population (GPS) (MAA3_F2009-65)

G - Reading Across the Curriculum
• read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary, and to be aware of current research (GPS) (MAA3_G2009-66)

CALCULUS

A - Process Skills
• use appropriate technology to solve mathematical problems (GPS) (MACA_A2009-1)
• build new mathematical knowledge through problem-solving (GPS) (MACA_A2009-2)
• solve problems that arise in mathematics and in other areas (GPS) (MACA_A2009-3)
• apply and adapt a variety of appropriate strategies to solve problems (GPS) (MACA_A2009-4)
• monitor and reflect on the process of mathematical problem-solving (GPS) (MACA_A2009-5)
• recognize reasoning and proof (evidence) as fundamental aspects of mathematics (GPS) (MACA_A2009-6)
• make and investigate mathematical conjectures (GPS) (MACA_A2009-7)
• investigate, develop, and evaluate mathematical arguments and proofs (GPS) (MACA_A2009-8)
• select and use various types of reasoning and methods of proof (GPS) (MACA_A2009-9)
• organize and consolidate mathematics thinking (GPS) (MACA_A2009-10)
Mathematics

A - Process Skills (continued)
- communicate mathematical thinking coherently to peers, teachers, and others (GPS) (MACA_A2009-11)
- analyze and evaluate the mathematical thinking and strategies of others (GPS) (MACA_A2009-12)
- use the terminology and language of mathematics to express mathematical ideas precisely (GPS) (MACA_A2009-13)
- recognize and use connections among mathematical ideas (GPS) (MACA_A2009-14)
- explain how mathematical ideas interconnect and build on one another to produce a coherent whole (GPS) (MACA_A2009-15)
- recognize and apply mathematics in contexts outside of mathematics (GPS) (MACA_A2009-16)
- create and use pictures, manipulatives, models, and symbols to organize, record, and communicate mathematical ideas (GPS) (MACA_A2009-17)
- select, apply, and translate among mathematical representations to solve problems (GPS) (MACA_A2009-18)
- use representations to model and interpret physical, social, and mathematical phenomena (GPS) (MACA_A2009-19)

B - Functions
- apply concepts of functions including domain, range, intercepts, symmetry, asymptotes, zeros, odd, even, and inverse (MACA_B2009-20)
- apply the algebra of functions by finding sum, product, quotient, composition, and inverse, where they exist (MACA_B2009-21)
- identify and apply properties of algebraic, trigonometric, piecewise, absolute value, exponential, and logarithmic functions (MACA_B2009-22)

C - Limits and Continuity
- calculate limits using algebra (MACA_C2009-23)
- evaluate limits of functions and apply properties of limits, including one-sided limits (MACA_C2009-24)
- estimate limits from graphs or tables of data (MACA_C2009-25)
- describe asymptotic behavior in terms of limits involving infinity (MACA_C2009-26)
- indicate where a function is continuous and where it is discontinuous (MACA_C2009-27)
- identify types of discontinuities graphically and analytically (MACA_C2009-28)
- apply the definition of continuity to a function at a point (MACA_C2009-29)

D - Derivatives
- define the derivative of a function in various ways: the limit of the difference quotient, the slope of the tangent line at a point, instantaneous rate of change, and the limit of the average rate of change (MACA_D2009-30)
- determine if a function is differentiable over an interval (MACA_D2009-31)
- determine where a function fails to be differentiable (MACA_D2009-32)
- apply the rules of differentiation, such as product and quotient rules, to algebraic functions, including successive derivatives (MACA_D2009-33)
- interpret derivative as a rate of change in the context of speed, velocity, and acceleration (MACA_D2009-34)
- apply the chain rule to composite functions, implicitly defined relations, and related rates of change (MACA_D2009-35)
- apply the rules of differentiation to trigonometric functions, such as product, quotient, and chain rules, including successive derivatives (MACA_D2009-36)

E - Applications of Derivatives
- apply the derivative to determine: the slope of a curve at a point, the equation of the tangent line to a curve at a point, and the equation of the normal line to a curve at a point (MACA_E2009-37)
- apply Rolle’s theorem and the mean value theorem (MACA_E2009-38)
- use the relationships between f(x), f’(x), and f''(x) to determine the increasing/decreasing behavior of f(x); determine the critical point(s) of f(x); determine the concavity of f(x) over an interval; and determine the point(s) of inflection of f(x) (MACA_E2009-39)
- given various pieces of information, sketch of graph(s) of f(x), f’(x), and f’’(x) (MACA_E2009-40)
- find absolute (global) and relative (local) extrema (MACA_E2009-41)
- solve optimization problems (MACA_E2009-42)
Mathematics

E - Applications of Derivatives (continued)
• apply the extreme value theorem to problem situations (MACA_E2009-43)
• model rates of change involved with related rates problems (MACA_E2009-44)

F - Integrals
• define the antiderivative and apply its properties to problems such as distance and velocity from acceleration with initial condition, growth, and decay (MACA_F2009-45)
• compute Riemann sums using left, right, and midpoint evaluations and trapezoids (MACA_F2009-46)
• calculate area by a definite integral of Riemann sums over equal subdivisions (MACA_F2009-47)
• calculate areas by evaluation sums using sigma notation (MACA_F2009-48)
• relate the definite integral to the concept of the area under a curve; define and apply the properties of the definite integral (MACA_F2009-49)
• identify and use the fundamental theorem of calculus in evaluation of definite integrals (MACA_F2009-50)
• evaluate integrals following directly from derivatives of basic functions (MACA_F2009-51)
• evaluate integrals by substitution of variables (including change of limits for definite integrals) (MACA_F2009-52)

G - Applications of the Integral
• apply the integral to the average or mean value of a function on an interval (MACA_G2009-53)
• evaluate the area between curves using integration formulas (MACA_G2009-54)
• evaluate the volume of a solid using known cross-sections (MACA_G2009-55)
• evaluate the volume of a solid of revolutions using the disk or washer method (MACA_G2009-56)

H - Reading Across the Curriculum
• read and discuss mathematical material to establish context for subject matter, develop mathematical vocabulary, and develop an awareness of current research (MACA_H2009-57)

EUCLIDEAN GEOMETRY

A - Geometry from a Synthetic Perspective
• identify, prove, and apply theorems and properties related to congruent triangles, right triangles, and polygons (QCC, SAT, ACT) (MAGA_A2001-1)
• apply properties and analyze relationships associated with points, segments, rays, lines, angles, planes, and polygons (QCC, SAT, ACT) (MAGA_A2001-2)
• apply properties and analyze relationships with respect to circles and segments, lines, arcs, and angles associated with circles (QCC, SAT, ACT) (MAGA_A2001-3)
• explore and interpret both two- and three-dimensional geometric figures using such topics as projections, cross sections, and locus problems (QCC, SAT, ACT) (MAGA_A2001-4)
• apply inductive and deductive reasoning processes to form conjectures and then form conjectures using valid reasoning and laws of logic (QCC, SAT, ACT) (MAGA_A2001-5)
• write proofs including paragraph, two column, flow-chart, and indirect (QCC, SAT, ACT) (MAGA_A2001-6)
• examine and apply properties of rotations, reflections, translations, dilations, and symmetry of geometric figures (QCC, ACT) (MAGA_A2001-7)
• apply transformations vectors and scale changes to find the image of figures on the coordinate plane (QCC, ACT) (MAGA_A2001-8)
• determine composites of transformations (QCC) (MAGA_A2001-9)
• identify isometries of geometric figures (QCC) (MAGA_A2001-10)
• analyze parallel and perpendicular line relationships (QCC, SAT, ACT) (MAGA_A2001-11)
• apply the properties of triangle inequalities (QCC, SAT) (MAGA_A2001-12)
Mathematics

A - Geometry from a Synthetic Perspective (continued)
- apply properties of polygons and polyhedrons (QCC, SAT) (MAGA_A2001-13)
- determine similar figures and apply the properties (QCC, SAT, ACT) (MAGA_A2001-14)
- create constructions associated with segments, angles, polygons, and circles using compass and straightedge, paper folding, mira, and/or computer graphing software (QCC) (MAGA_A2003-1)
- prove and apply theorems associated with polygons with respect to angles, sides, segments, and angle sums (QCC) (MAGA_A2003-2)

B - Geometry from an Algebraic Perspective
- apply formulas for distances, midpoints, slopes, and circles (QCC, SAT, ACT) (MAGA_B2001-15)
- determine perimeter, area, circumference, arc length, area of sectors, volume, and surface area of geometric figures using appropriate units (QCC, SAT, ACT) (MAGA_B2001-16)
- draw and interpret three-dimensional graphs (QCC) (MAGA_B2001-17)
- apply the quadratic formula (QCC, SAT) (MAGA_B2001-18)
- write coordinate proofs (QCC, ACT) (MAGA_B2001-19)
- find the coordinates of the point of intersection of two lines (QCC) (MAGA_B2001-20)
- write and graph equations of parallel, perpendicular, and intersecting lines satisfying given conditions (QCC, SAT) (MAGA_B2001-21)
- compare and apply properties associated with similar figures using scale factors (QCC, HSGT, ACT) (MAGA_B2001-22)
- apply congruence and similarity properties of parallel lines, polygons, and solids (QCC) (MAGA_B2003-3)
- investigate and apply the Pythagorean theorem and its converse (QCC) (MAGA_B2003-4)

C - Algebra
- write equations satisfying given conditions (QCC, ACT) (MAGA_C2001-23)

D - Probability
- apply geometric probability (SAT, ACT) (MAGA_D2001-24)

E - Trigonometry
- apply special right triangle relationships (QCC, SAT, ACT) (MAGA_E2001-25)
- explore sine, cosine, and tangent functions in right triangles (QCC, ACT) (MAGA_E2001-26)

F - Discrete Mathematics
- develop and apply algorithms (QCC, ACT) (MAGA_F2001-27)
- optimize perimeters, areas, and volumes and solve related problems (QCC, ACT) (MAGA_F2001-28)

HONORS/GIFTED EUCLIDEAN GEOMETRY

A - Geometry from a Synthetic Perspective
- identify, prove, and apply theorems and properties related to congruent triangles, right triangles and polygons (QCC, SAT) (MAHG_A2001-1)
- apply properties and analyze relationships associated with points, segments, rays, lines, angles, planes, and polygons (QCC, SAT) (MAHG_A2001-2)
- explore and interpret both two- and three-dimensional geometric figures using such topics as projections, cross sections, and locus problems (QCC) (MAHG_A2001-3)
- create constructions associated with segments, angles, polygons, and circles using compass and straightedge, paper folding, mira, and/or computer graphing software (QCC) (MAHG_A2001-4)
A - Geometry from a Synthetic Perspective (continued)
• apply inductive and deductive reasoning process to form conjectures and then prove conjectures using valid reasoning and laws of logic (QCC) (MAHG_A2001-6)
• prove and apply theorems associated with polygons with respect to angles, sides, segments, and angle sum (QCC) (MAHG_A2001-7)
• apply properties and analyze relationships with respect to circles and segments, lines, and arcs, and angles associated with circles (QCC) (MAHG_A2001-8)
• construct direct and indirect proofs in written form such as paragraph, two-column, or flow-chart formats (QCC) (MAHG_A2001-10)
• apply and prove congruence and similarity properties of polygons and solids (QCC, SAT) (MAHG_A2001-11)
• compare and apply properties associated with similar figures (QCC) (MAHG_A2002-1)
• recognize parallel lines and planes, skew lines, and pairs of angles formed when two lines are cut by a transversal (alternate and same side, interior and exterior, corresponding) (QCC, SAT) (MAHG_A2003-1)
• use properties of quadrilaterals to establish and test relationships involving diagonals, angles, and lines of symmetry (QCC) (MAHG_A2003-2)
• determine the equivalence and validity of truth tables including sentences involving conditional statements, conjunctions, disjunctions, and negations (QCC) (MAHG_A2003-3)
• determine truth tables for sentences and use Venn diagrams to illustrate the relationship represented by truth tables (QCC) (MAHG_A2003-4)
• recognize and apply similar polygons using ratio and proportion (QCC) (MAHG_A2003-5)

B - Geometry from an Algebraic Perspective
• write and graph equations of parallel, perpendicular, and intersecting lines satisfying given conditions (QCC, SAT, ACT) (MAHG_B2001-12)
• develop and apply formulas for distance, midpoint, slope, and circles (QCC, SAT, ACT) (MAHG_B2001-13)
• determine perimeter, area, circumference, arc length, area of sectors, and surface area of geometric figures using appropriate units (QCC, SAT, ACT) (MAHG_B2001-14)
• write coordinate proofs (QCC) (MAHG_B2001-15)
• analyze effects of reflections, rotations, translations, dilations, and symmetry of geometric figures in the coordinate plane (QCC, HSGT) (MAHG_B2001-16)
• investigate and apply transformation vectors and scale changes to find the image of figures on the coordinate plane (QCC) (MAHG_B2001-17)
• create composites of transformations (QCC) (MAHG_B2001-19)
• apply indirect measurement and similarity theorems to solve problems involving similar polygons (QCC, ACT) (MAHG_B2002-2)
• develop and apply formulas to find lateral area, volume, and surface area of solids (QCC, ACT) (MAHG_B2002-3)
• find the exact or approximate volume and surface area of solids composed of prisms, pyramids, cylinders, cones, and/or spheres (QCC, ACT) (MAHG_B2002-4)
• determine the image, pre image, or inverse of a given mapping, and the composite of two mappings (QCC) (MAHG_B2003-6)
• investigate, apply, and examine proofs of the Pythagorean theorem and its converse (QCC) (MAHG_B2003-7)
• compare the areas of similar polygons and the volume of similar solids to solve problems and justify the reasonableness of results (QCC) (MAHG_B2003-8)
• find the coordinates of the point of intersection of two lines (QCC) (MAHG_B2003-9)

C - Trigonometry
• apply special right triangle relationships (QCC, SAT, ACT) (MAHG_C2001-25)
• explore and apply sine, cosine, and tangent ratios in right triangles (QCC, SAT, ACT) (MAHG_C2001-26)
• use tangent, sine, and cosine ratios to solve application problems (QCC) (MAHG_C2003-10)
• apply the properties of triangle inequalities (QCC) (MAHG_C2003-11)
• apply geometric probability (QCC, PSAT, SAT, ACT) (MAHG_C2003-12)
C – Trigonometry (continued)
• optimize perimeter, area, and volumes of geometric figures and solids (QCC) (MAHG_C2003-13)

ALGEBRA II

A - Algebra
• use graphs to solve linear and quadratic equations and inequalities (QCC, SAT, ACT) (MAAA_A2001-1)
• describe functional relationships (QCC, ACT) (MAAA_A2001-2)
• solve, graph, apply, and interpret systems of linear and non-linear equations and inequalities in two and three variables using a variety of methods (QCC, SAT, ACT) (MAAA_A2001-3)
• identify, write, solve, and graph absolute value, step, and constant functions (QCC, SAT, ACT) (MAAA_A2001-4)
• solve and graph linear and quadratic equations and inequalities in one and two variables (QCC, SAT, ACT) (MAAA_A2001-5)
• investigate, solve, and graph direct, joint, inverse, and combined variation problems (QCC, ACT) (MAAA_A2001-6)
• solve formulas for one variable (QCC) (MAAA_A2003-1)
• evaluate the results of matrix operations, such as addition, multiplication, and scalar operations, when defined (MAAA_A2003-2)
• simplify and evaluate expressions containing integer and rational exponents (QCC) (MAAA_A2003-3)
• identify and graph linear equation in one and two variables including vertical and horizontal lines, and write equations for lines using various combinations of given information (QCC) (MAAA_A2003-5)
• fit and model linear and nonlinear curves to data (QCC, SAT) (MAAA_A2003-7)
• identify the inverse of relations algebraically and graphically, and determine if the inverse relation is a function (QCC) (MAAA_A2003-8)
• solve and graph linear inequalities in one variable, including compound inequalities and absolute value equations and inequalities (QCC) (MAAA_A2003-9)
• determine the number of solutions for a system of linear equations, and recognize the system as consistent (dependent or independent) or inconsistent (QCC) (MAAA_A2003-10)

B - Geometry from an Algebraic Perspective
• apply the Pythagorean theorem, distance, and midpoint formulas as they pertain to conics (QCC, SAT, ACT) (MAAA_B2001-7)
• identify, compare, graph, and solve problems involving conic sections (QCC, ACT) (MAAA_B2001-8)
• analyze transformations of functions and relations, and determine the effects on graphs and equations (QCC, ACT) (MAAA_B2001-9)

C - Statistics
• transform data to make interpretations and predictions (QCC, ACT) (MAAA_C2001-11)
• analyze the effects of data transformation on measures of central tendency and variability (MAAA_C2001-12)
• design, conduct, and interpret a statistical experiment (QCC) (MAAA_C2001-13)
• analyze data using measures of central tendency and standard deviations (MAAA_C2001-14)

D - Probability
• discriminate between and determine the number of permutations and combinations on n things taken r at a time (QCC, SAT, ACT) (MAAA_D2001-14)
• solve numeration and finite probability problems, including finding the probability of mutually-exclusive events occurring (QCC, ACT) (MAAA_D2001-15)
• apply theoretical and conditional probabilities to find the probability of an event by determining the sample space of all possible outcomes and the number of successful outcomes (QCC, ACT) (MAAA_D2001-16)
• conduct binomial experiments (QCC) (MAAA_D2001-17)
• distinguish among odds, probabilities, and change and find the odds associated with given events (QCC, HSGT, SAT) (MAAA_D2001-18)
Mathematics

D – Probability (continued)
• find theoretical and conditional probability, and determine probability of independent, dependent, and conditional events (QCC, SAT) (MAAA_D2001-19)
• define probability in terms of sample spaces, outcomes and events (MAAA_D2003-15)
• apply the binomial theorem and relate it to Pascal’s triangle (MAAA_D2003-16)
• expand and simplify binomial expressions (QCC) (MAAA_D2003-17)
• explore normal distributions (QCC) (MAAA_D2003-18)

E - Functions and Relations
• perform operations with complex numbers, including adding, subtracting, multiplying, dividing, and find additive inverses, conjugates, and absolute values (QCC, ACT) (MAAA_E2001-20)
• develop algorithms and analyze functions using the fundamental theorem of algebra (QCC) (MAAA_E2001-23)
• determine and graph compositions and inverses of functions, using multiple notation formats, such as f [g(x)] and (f o g)(x) (QCC, ACT) (MAAA_E2001-24)
• recognize and apply the inverse relationship of exponential and logarithmic functions and graph and model each function (QCC, ACT) (MAAA_E2001-25)
• identify domain and range for algebraic and transcendental functions (QCC) (MAAA_E2001-26)
• compare and contrast linear, quadratic, exponential, logarithmic, and power functions (ACT) (MAAA_E2001-27)
• solve radical equations with one or two radical terms (QCC) (MAAA_E2003-19)
• determine quotients of polynomials using appropriate techniques (monomial divisor, long, or synthetic division) or graphing tools (QCC) (MAAA_E2003-20)
• apply theorems, including remainder, factor, rational root, and the fundamental theorem of algebra, to polynomial equations (QCC) (MAAA_E2003-21)
• determine if a relation is linear based on an equation, data table, or graph (QCC) (MAAA_E2003-22)
• approximate real roots of polynomial equations using calculators or computers (QCC) (MAAA_E2003-23)
• identify, define, and graph relations that are functions, and evaluate functions for given input values (QCC) (MAAA_E2003-24)
• determine real or imaginary nth roots of real numbers (QCC) (MAAA_E2003-26)
• simplify radical expressions and their products, quotients, sums, and differences, including rationalizing denominators by using properties of radicals (QCC) (MAAA_E2003-27)
• solve quadratic equations and inequalities using various methods including factoring, completing the square, the quadratic formula, and graphing tools and methods (QCC) (MAAA_E2003-29)
• graph quadratic functions and determine their maximum or minimum values, the number of zeros, and whether the zeros are real or imaginary (QCC) (MAAA_E2003-30)
• solve problems using quadratics, such as problems involving motion and minimum/maximum values, and make predictions using data and regression techniques (QCC) (MAAA_E2003-31)
• analyze the nature of the roots of quadratic equations by using the discriminant and the relationship between roots and coefficients (QCC) (MAAA_E2003-32)
• model and solve exponential and logarithmic problems involving growth, decay, and compound interest, and make predictions from collected data using regression techniques (QCC) (MAAA_E2003-33)
• apply the definition and properties of logarithms and exponents to evaluate logarithms and solve exponential and logarithmic equations (QCC) (MAAA_E2003-35)
• solve rational equations and simplify rational expressions and their products, quotients, sums, and differences (QCC, SAT, ACT) (MAAA_E2004-1)

F - Discrete Mathematics
• develop and investigate axiomatic systems (MAAA_F2001-28)
• apply basic counting principles and solve basic and compound counting problems (QCC) (MAAA_F2001-29)
• find sums and products of matrices (QCC) (MAAA_F2003-36)
• find determinants of 2 x 2 and 3 x 3 matrices (QCC) (MAAA_F2003-37)
Mathematics

F - Discrete Mathematics (continued)
• find and apply inverses of 2 x 2 and 3 x 3 matrices (QCC) (MAAA_F2003-38)
• apply matrices to practical situations (QCC) (MAAA_F2003-39)
• interpret arithmetic and geometric sequences and series (QCC, SAT, ACT) (MAAA_F2004-2)

HONORS/GIFTED ALGEBRA II

A - Geometry from an Algebraic Perspective
• analyze translations, rotations, and reflections of functions and relations and determine the effects on graphs and equations (QCC) (MAHA_A2001-1)
• investigate families of lines with different sloped and y-intercepts (QCC, ACT) (MAHA_A2001-2)
• analyze scale changes of functions and relations and determine the effects on graphs and equations (QCC) (MAHA_A2001-3)
• apply the Pythagorean theorem, distance, and midpoint formulas (QCC) (MAHA_A2001-4)
• represent coordinates in trigonometric and polar form (QCC) (MAHA_A2003-1)

B - Statistics
• fit linear and nonlinear curves to data (QCC, SAT) (MAHA_B2001-5)
• model exponential and logarithmic situations (QCC) (MAHA_B2001-6)
• analyze the effects of data transformations on measures of central tendency and variability (SAT) (MAHA_B2001-7)
• transform data to make interpretations and predictions (SAT) (MAHA_B2001-8)
• analyze data using measures of central tendency and standard deviations (QCC) (MAHA_B2003-2)
• apply the definitions and properties of logarithms (QCC) (MAHA_B2003-3)
• recognize the inverse relationship of logarithms and exponential functions and graph each function (QCC) (MAHA_B2003-4)
• determine values of common and natural logarithms and antilogarithms and apply the change of base rule (QCC) (MAHA_B2003-5)
• solve exponential and logarithmic equations (QCC) (MAHA_B2003-6)
• fit polynomials to data (MAHA_B2003-7)

C - Probability
• apply theoretical and conditional probabilities (QCC, ACT) (MAHA_C2001-9)
• conduct and analyze binomial experiments (QCC, ACT) (MAHA_C2001-10)
• apply Pascal’s triangle and its properties to binomial experiments (QCC, ACT) (MAHA_C2001-11)
• use permutations and combinations (QCC, SAT) (MAHA_C2001-12)
• solve numeration and finite probability problems (QCC, SAT, ACT) (MAHA_C2001-13)
• explore normal distributions (MAHA_C2003-8)
• determine probability of independent, dependent, and conditional probabilities (MAHA_C2003-9)
• use the binomial theorem to expand and simplify expressions (MAHA_C2003-10)

D - Functions and Relations
• translate among tabular, symbolic, and graphical representations of functions (QCC, ACT) (MAHA_D2001-14)
• apply linear programming models (MAHA_D2001-15)
• compare and contrast linear, quadratic, exponential, logarithmic, and power functions (ACT) (MAHA_D2001-16)
• describe and analyze functional relationships (QCC, ACT) (MAHA_D2001-17)
• graph and model piecewise functions (QCC) (MAHA_D2001-18)
• apply absolute value, step, and constant functions (QCC) (MAHA_D2001-19)
• apply patterns of functional models (QCC) (MAHA_D2001-20)
• find and graph compositions and inverses of functions (QCC, ACT) (MAHA_D2001-21)
Mathematics

D - Functions and Relations (continued)
- investigate direct, inverse, joint, and quadratic variation (QCC, SAT, ACT) (MAHA_D2001-22)
- formulate, solve, and graph equations for variation (QCC, ACT) (MAHA_D2001-23)
- formulate linear and quadratic equations and inequalities for given conditions (QCC, SAT, ACT) (MAHA_D2001-24)
- find roots and intercepts of quadratic functions algebraically (QCC, SAT, ACT) (MAHA_D2001-25)
- make connections among different representations of linear and quadratic functions (QCC, SAT, ACT) (MAHA_D2001-26)
- explore polynomial functions including finding roots and intercepts (QCC, SAT, ACT) (MAHA_D2001-28)
- determine maximum and minimum points of a graph and interpret the results in problem situations (QCC, SAT) (MAHA_D2001-29)
- graph and solve problems involving circles, ellipses, hyperbolas, and parabolas (MAHA_D2001-30)
- identify domain and range for algebraic functions (QCC) (MAHA_D2003-11)
- determine quotients of polynomials using appropriate techniques (QCC) (MAHA_D2003-12)
- evaluate and simplify expressions with fractional exponents (QCC) (MAHA_D2003-13)
- solve equations with one or more radical terms (QCC) (MAHA_D2003-14)
- apply and graph absolute value functions (QCC) (MAHA_D2003-15)
- investigate parallel and perpendicular lines (QCC) (MAHA_D2003-16)
- analyze the nature of the roots of quadratic equations by using the discriminant and the relationship between roots and coefficients (QCC) (MAHA_D2003-17)

E - Discrete Mathematics
- use matrices to solve systems of equations and inequalities (QCC) (MAHA_E2001-31)
- analyze arithmetic and geometric sequences and series (QCC) (MAHA_E2001-34)
- find sums and products of matrices (MAHA_E2003-18)
- find determinants of 2 x 2 and 3 x 3 matrices (QCC) (MAHA_E2003-19)
- find and apply inverses of 2 x 2 and 3 x 3 matrices (QCC) (MAHA_E2003-20)

F - Trigonometry
- develop, graph, and apply the six trigonometric functions (QCC, ACT) (MAHA_F2001-35)
- solve problems using trigonometric ratios (QCC, ACT) (MAHA_F2001-36)
- identify and compare conic sections and sketch their graphs (MAHA_F2003-21)
- convert measures of angles between radians and degrees (MAHA_F2003-22)
- apply laws of sines and cosines (MAHA_F2003-23)

G - Algebra
- simplify expressions containing integral exponents (QCC) (MAHA_G2001-37)
- simplify rational and irrational expressions (QCC) (MAHA_G2001-38)
- solve problems involving rational and irrational equations (QCC) (MAHA_G2001-39)
- factor polynomials (QCC, SAT, ACT) (MAHA_G2001-40)
- investigate complex numbers (QCC, SAT, ACT) (MAHA_G2001-41)
- perform operations with complex numbers (QCC, ACT) (MAHA_G2001-42)
- use graphs to solve linear and quadratic equations and inequalities (QCC, SAT, ACT) (MAHA_G2001-43)
- solve and graph linear and quadratic equations and inequalities in two variables (QCC, SAT, ACT) (MAHA_G2001-44)
- solve polynomial equations using the following theorems: remainder, factor, rational root, and fundamental theorem of algebra (QCC) (MAHA_G2001-45)
ADVANCED ALGEBRA AND TRIGONOMETRY

A - Algebra
• make connections among different representations of linear and quadratic functions (QCC, ACT) (MAAT_A2001-1)

B - Geometry from an Algebraic Perspective
• graph and perform two- and three-dimensional vector computations (QCC, ACT) (MAAT_B2001-2)
• apply vector operations (QCC) (MAAT_B2001-3)
• model with vectors (QCC) (MAAT_B2001-4)
• verify geometric properties using vectors (QCC) (MAAT_B2001-5)

C - Functions
• investigate systems of three equations in three unknowns (QCC) (MAAT_C2001-6)
• draw and interpret three-dimensional graphs (QCC) (MAAT_C2001-7)
• apply piecewise and parametric functions and equations (MAAT_C2001-8)
• model and solve with polynomial, rational, radical, and transcendental functions and their compositions (QCC, ACT) (MAAT_C2001-9)
• analyze functions and their inverses (QCC, ACT) (MAAT_C2001-10)
• graph and analyze both linear and non-linear systems (QCC) (MAAT_C2001-11)
• apply linear programming models (MAAT_C2001-12)

D - Discrete Mathematics
• interpret arithmetic and geometric sequences and series (QCC, SAT, ACT) (MAAT_D2001-13)
• write and interpret information matrices (QCC) (MAAT_D2001-14)
• apply sums and products of matrices (QCC) (MAAT_D2001-15)
• apply determinants of matrices (QCC) (MAAT_D2001-16)
• use matrices to solve systems of equations (QCC) (MAAT_D2001-17)
• use matrices to determine transformations (QCC) (MAAT_D2001-18)
• find the inverse of a square matrix, if it exists, for 2 x 2 and 3 x 3 matrices (QCC) (MAAT_D2001-19)
• use the binomial theorem to expand and simplify binomial expressions (QCC) (MAAT_D2003-2)

E - Trigonometry
• solve trigonometric equations and verify trigonometric identities (QCC, ACT) (MAAT_E2001-19)
• graph and model circular functions (QCC, ACT) (MAAT_E2001-20)
• apply transformations to graphs of circular functions (QCC) (MAAT_E2001-21)
• graph and evaluate trigonometric inverses (QCC) (MAAT_E2001-22)
• apply laws of sines and cosines including finding area of triangles (QCC) (MAAT_E2001-23)
• graph and apply trigonometric and circular functions (QCC, ACT) (MAAT_E2001-24)
• model with trigonometric and circular functions (QCC) (MAAT_E2001-25)
• solve trigonometric and circular equations (QCC) (MAAT_E2001-26)
• investigate trigonometric functions using polar coordinates and find powers and roots of complex numbers (QCC) (MAAT_E2001-27)
• represent complex numbers in trigonometric form (QCC) (MAAT_E2001-28)
• represent coordinates in trigonometric and polar form (QCC) (MAAT_E2001-29)
• sketch an angle in standard position and determine the reference and coterminal angles (QCC) (MAAT_E2003-3)
• determine the area of any triangle using an appropriate formula (QCC) (MAAT_E2003-4)
• convert measures of angles between radians and degrees (QCC) (MAAT_E2003-5)
• define and apply the basic operations and properties of complex numbers (QCC) (MAAT_E2003-6)
Mathematics

F - Underpinnings of Calculus
- explore slopes of secants approaching slopes of tangents (MAAT_F2001-30)
- determine maximum and minimum points of a graph and interpret the results in problem situations (QCC) (MAAT_F2001-31)
- analyze curves with respect to intervals of increase/decrease, end behavior, and horizontal, vertical, and oblique asymptotes (QCC) (MAAT_F2001-32)
- investigate Pascal’s triangle and its properties (QCC) (MAAT_F2001-33)

PRECALCULUS/GIFTED PRECALCULUS

A - Trigonometry
- apply circle and angle relationships (QCC, SAT, ACT) (MAPC_A2001-1)
- apply special right triangle relationships (QCC, SAT, ACT) (MAPC_A2001-2)
- develop, graph, and apply the six trigonometric functions (QCC, ACT) (MAPC_A2001-3)
- apply laws of sines and cosines and determine area of any triangle (QCC) (MAPC_A2001-4)
- apply properties of circular functions (QCC) (MAPC_A2001-5)
- represent complex numbers in trigonometric form (MAPC_A2001-6)
- solve trigonometric equations and verify trigonometric identities (QCC, ACT) (MAPC_A2001-7)
- graph and model circular functions (QCC) (MAPC_A2001-8)
- apply transformations to graphs of circular functions (MAPC_A2001-9)
- solve, graph and evaluate trigonometric inverses (QCC) (MAPC_A2001-10)
- solve and graph polar equations (QCC) (MAPC_A2001-11)

B - Statistics
- fit and model linear and nonlinear curves to data (QCC) (MAPC_B2001-12)

C - Functions and Relations
- translate among tabular, symbolic, and graphical representation of functions (MAPC_C2001-13)
- solve polynomials equations over the field of complex numbers using the following theorems: remainder, factor, rational root, and fundamental theorem of algebra (QCC) (MAPC_C2001-14)
- find and graph compositions of functions (QCC) (MAPC_C2001-15)
- find and graph inverses of functions (QCC) (MAPC_C2001-16)
- solve, graph, and model exponential and logarithmic equations and functions (QCC) (MAPC_C2001-17)
- graph and model piecewise functions (QCC) (MAPC_C2001-18)
- graph and analyze algebraic and transcendental functions (QCC) (MAPC_C2001-19)
- graph and analyze both linear and non-linear systems (QCC) (MAPC_C2001-20)
- graph and perform operations with complex numbers (QCC) (MAPC_C2001-21)

D - Discrete Mathematics
- use mathematical induction (QCC) (MAPC_D2001-23)
- analyze arithmetic and geometric sequences and series and apply the binomial theorem (QCC) (MAPC_D2003-1)

E - Underpinnings of Calculus
- analyze curves with respect to intervals of increase/decrease, end behavior, and horizontal, vertical, and oblique asymptotes (QCC) (MAPC_E2001-27)

F - Geometry from an Algebraic Perspective
- identify and compare conic sections and sketch their graphs (MAPC_F2001-28)
- perform vector operations algebraically and geometrically (QCC) (MAPC_F2001-29)
- graph and apply two- and three-dimensional vector problems (QCC) (MAPC_F2001-30)
G - Patterns and Functions
• apply sums, products, determinants, and inverses of matrices (QCC) (MAPC_G2001-31)

DISCRETE MATHEMATICS

A - Analysis
• apply fair-division algorithms (QCC, SAT) (MADM_A2002-1)
• determine election results using various procedures (QCC) (MADM_A2002-2)
• identify paradoxes (QCC) (MADM_A2002-3)
• use weighted voting, power indexes, and Arrow’s fairness criteria (QCC) (MADM_A2002-4)
• interpret Arrow’s impossibility theorem (QCC) (MADM_A2002-5)
• identify methods of apportionment and apportionment paradoxes (QCC) (MADM_A2003-1)

B - Graph Theory
• examine the structure of a graph (QCC) (MADM_B2002-6)
• construct different representations of graphs (QCC) (MADM_B2002-7)
• apply shortest path algorithms (QCC) (MADM_B2002-8)
• analyze networks using graphs as models (QCC) (MADM_B2002-9)
• solve problems involving the notions of connectedness, completeness, bipartiteness, planarity, and graph coloring (QCC) (MADM_B2002-10)
• identify properties of graphs having circuits and/or paths (QCC) (MADM_B2002-11)
• apply definitions of a tree (QCC) (MADM_B2002-12)
• find minimal spanning tree for a given graph (QCC) (MADM_B2002-13)

C - Recurrence Relations
• iterate first-order recurrence relations (QCC, SAT) (MADM_C2002-21)
• develop the closed form of a first-order linear recurrence relation (QCC, SAT) (MADM_C2002-22)
• apply process of iteration in different situations (QCC) (MADM_C2002-23)
• analyze searching and sorting algorithms (QCC, SAT) (MADM_C2002-24)

D - Matrix Algebra
• use powers of adjacency matrices to study connectivity properties of graphs and digraphs (QCC) (MADM_D2002-29)
• solve probability problems using tree analysis by applying Markov’s algorithm (QCC, SAT) (MADM_D2002-30)
• solve population growth and control problems using the Leslie model (QCC) (MADM_D2002-31)
• use the Leontief input-output model of an economy (QCC) (MADM_D2002-32)

E - Sets
• describe sets using appropriate notation and terminology (QCC) (MADM_E2002-33)
• identify simple relations between sets (QCC) (MADM_E2002-34)
• perform operations on sets (QCC) (MADM_E2002-35)
• illustrate, and apply commutative laws, associative laws, distributive laws, and DeMorgan’s law (QCC) (MADM_E2002-36)
• construct simple proofs using Venn diagrams (QCC) (MADM_E2002-37)
• determine power sets and Cartesian products of sets (QCC) (MADM_E2002-38)
• determine sets are closed with respect to a given operation (QCC) (MADM_E2002-39)
• investigate a variety of operations on various sets (QCC) (MADM_E2002-40)
• identify group properties for given sets and operations (QCC) (MADM_E2002-41)
Mathematics

F - The Real Number System
• examine the real number system (QCC) (MASTM_F2002-42)
• construct simple proofs about even and odd numbers (QCC, SAT) (MASTM_F2002-43)
• write an integer given in base ten as a numeral in any base with emphasis on base two (QCC) (MASTM_F2002-44)

STATISTICS

A - Exploring One-Variable Data
• analyze and interpret data from tables, graphs, and charts including frequency, distributions, histograms, line plots, stem-and-leaf plots, and box plots (QCC, HSGT, SAT, ACT) (MASTM_A2002-1)
• summarize data using measures of central tendency (QCC, HSGT, SAT, ACT) (MASTM_A2002-2)
• summarize data using measures of spread such as range, interquartile range, variance, and standard deviation (QCC, SAT, ACT) (MASTM_A2002-3)
• identify trends in data represented graphically, including patterns, clusters, and outliers (QCC, HSGT, SAT, ACT) (MASTM_A2002-4)

B - Exploring Two-Variable Data
• analyze and interpret data from scatter plots (QCC, HSGT, SAT, ACT) (MASTM_B2002-5)
• analyze bivariate data represented graphically and predict results by fitting a line to the data using methods such as median fit and least squares and tools such as computers and calculators (QCC, SAT, ACT) (MASTM_B2002-6)
• characterize the correlation, calculate the correlation coefficient, and determine if a linear relationship exists (QCC) (MASTM_B2002-7)
• investigate nonlinear relationships and use a grapher to determine the correlation coefficient (QCC, SAT, ACT) (MASTM_B2002-8)
• determine the effect that linear transformations have on the data (QCC, SAT, ACT) (MASTM_B2002-9)

C - Sampling
• distinguish between samples and populations (QCC) (MASTM_C2002-10)
• identify characteristics of representative samples to minimize bias and error (QCC) (MASTM_C2002-11)
• recognize the variability among repeated samples drawn from the same population (QCC) (MASTM_C2002-12)
• apply the concept of randomness to sample selection (QCC) (MASTM_C2002-13)
• identify appropriate sampling techniques appropriate to a given situation (QCC, HSGT, ACT) (MASTM_C2002-14)
• choose an appropriate method of data collection such as surveys or opinion polls to solve problems (QCC, HSGT, ACT) (MASTM_C2002-15)
• collect and analyze data, using experimental models, random number tables, and generators (QCC, HSGT, ACT) (MASTM_C2002-16)

D - Probability and Simulation
• use the empirical approach to estimate probability based upon student-generated data sets, games of chance, manipulatives, and historic data (QCC, HSGT, ACT) (MASTM_D2002-17)
• apply the law of large numbers to develop the concept of theoretical probability (QCC, ACT) (MASTM_D2002-18)
• use the eight-step process to build a model for simulating a given problem situation (QCC, ACT) (MASTM_D2002-19)
• use manipulative materials, random number generators, calculators, and computers to perform a simulation to approximate the solution of a problem (QCC, HSGT, ACT) (MASTM_D2002-20)
• perform simulations for problems where the probability of success is known or unknown (QCC, ACT) (MASTM_D2002-21)
• perform simulations for situations with several key components (QCC, ACT) (MASTM_D2002-22)
• apply counting techniques and calculate the probability of the union and the intersection of two events (QCC, SAT, ACT) (MASTM_D2002-23)
Mathematics

D - Probability and Simulation (continued)
- determine the probability of a complement (QCC, HSGT, ACT) (MAST_D2002-24)
- calculate conditional probability (QCC, ACT) (MAST_D2002-25)
- distinguish between odds and probabilities (QCC, HSGT, ACT) (MAST_D2002-26)
- find the odds associated with given events (QCC, HSGT, ACT) (MAST_D2002-27)
- assign probabilities to the outcomes of a random variable and calculate expected value (QCC, ACT) (MAST_D2002-28)
- distinguish between discrete and continuous distributions (QCC) (MAST_D2002-29)
- solve problems using probability distributions (QCC, HSGT, ACT) (MAST_D2002-30)

E - Inference
- construct sampling distributions from binomial populations by using student experiments, random number tables, and computer simulations (QCC, SAT, ACT) (MAST_E2002-31)
- construct and interpret 90% and 95% box plots for various size samples (QCC, SAT, ACT) (MAST_E2002-32)
- develop the concept of estimating population parameters using confidence intervals produced from comparisons of box plots (QCC, SAT, ACT) (MAST_E2002-33)
- apply the capture-recapture model to generate a confidence interval for a population (QCC) (MAST_E2002-34)
- use the central limit theorem to understand the impact on the distribution of the sample mean, including the effect of sample size (QCC) (MAST_E2002-35)
- develop point and interval estimates for parameters such as mean, standard deviation, and proportion of successes (QCC) (MAST_E2002-36)

F - Analysis
- identify sound examples of applying statistics in decision-making and correct misuses of statistics (QCC) (MAST_F2003-1)
- interpret the outcomes of data analysis and communicate results (MAST_F2003-2)

CONCEPTS OF PROBLEM SOLVING

A - Number and Number Relationships
- compute with integers, rational numbers, irrational numbers and exponential expressions (QCC, HSGT, SAT) (MAT1_A2001-1)
- apply ratios, proportions, and percents (QCC, HSGT, SAT) (MAT1_A2001-2)
- use estimation to determine the reasonableness of results (QCC, HSGT, SAT) (MAT1_A2001-3)
- convert numbers from standard form to scientific notation and vice-versa (MAT1_A2001-4)
- identify and apply the properties of real numbers (QCC, HSGT, SAT) (MAT1_A2003-1)
- order real numbers including fractions and decimals (QCC, HSGT) (MAT1_A2003-2)

B - Algebra
- write equations for relations and linear functions given tables and graphs (QCC) (MAT1_B2001-5)
- write, evaluate, and perform operations with algebraic expressions (QCC, HSGT, SAT) (MAT1_B2001-6)
- use rules to produce linear graphs (QCC, SAT) (MAT1_B2001-7)
- apply direct and inverse relationships (QCC, HSGT, SAT) (MAT1_B2001-8)
- solve and graph linear equations and inequalities (QCC, SAT) (MAT1_B2001-9)
- solve problems that involve systems of two linear equations in two variables (QCC, SAT) (MAT1_B2003-3)

C - Geometry from an Algebraic Perspective
- determine perimeter and area of polygons and irregular figures (QCC, HSGT, SAT) (MAT1_C2001-10)
- graph figures in coordinate plane (QCC, HSGT, SAT) (MAT1_C2001-11)
- investigate scale changes on coordinate graphs (QCC, HSGT, SAT) (MAT1_C2001-12)
- investigate and apply the Pythagorean theorem (QCC, HSGT, SAT) (MAT1_C2001-13)
C - Geometry from an Algebraic Perspective (continued)
• estimate measurements and solve problems in both customary and metric systems (QCC) (MAT1_C2001-14)
• determine volume and surface area of solids (QCC) (MAT1_C2001-15)

D - Geometry from a Synthetic Perspective
• investigate parallel and perpendicular lines (QCC, SAT) (MAT1_D2001-16)
• investigate properties of polygons (QCC, HSGT, SAT) (MAT1_D2001-17)
• identify and differentiate between similar and congruent figures (QCC) (MAT1_D2001-18)
• identify figures that have been transformed by rotation, reflection, and translation (QCC) (MAT1_D2001-19)
• solve for missing sides and angles of a triangle (QCC, SAT) (MAT1_D2003-4)

E - Statistics
• graph ordered pairs (QCC, HSGT) (MAT1_E2001-20)
• fit lines to data and interpret linear graphs (QCC, SAT) (MAT1_E2001-21)
• use the mean, median, and mode to describe central tendencies and range to describe variability of a data set (QCC, HSGT, SAT) (MAT1_E2001-22)
• judge the validity of arguments (QCC) (MAT1_E2001-23)
• interpret and make predictions from graphical representations of data (QCC) (MAT1_E2003-5)

F - Discrete Mathematics
• develop and present examples of simple algorithms (MAT1_F2001-24)

G - Probability
• identify possible outcomes of simple experiments and predict or describe the probability of a given event expressed as a rational from zero through one (QCC) (MAT1_G2003-6)

CONCEPTS OF ALGEBRA

A - Number and Number Relationships
• use estimation to determine the reasonableness of results (QCC, HSGT) (MAT2_A2001-1)
• compute with integers, rational numbers, irrational numbers, and exponential expressions (QCC, HSGT, SAT) (MAT2_A2001-2)
• apply and solve ratios, proportions, and percents (QCC, HSGT, SAT) (MAT2_A2001-4)
• use estimation, conversion, and exact calculations in solving measurement problems using appropriate technology/instruments (MAT2_A2001-5)

B - Algebra
• write, evaluate, and perform operations with algebraic expressions and formulas (QCC, SAT) (MAT2_B2001-6)
• sketch a graph of linear equations and inequalities in two variables given information such as slope, x-intercept, y-intercept, two points, or a linear equation; include special cases as vertical, horizontal, parallel, and perpendicular lines (QCC) (MAT2_B2001-7)
• solve simple rational equations (QCC) (MAT2_B2001-8)
• analyze graphical representations of systems of linear equations in two variables (QCC) (MAT2_B2001-9)
• solve quadratic equations using graphing factoring and the quadratic formula (QCC) (MAT2_B2001-10)
• factor polynomials (QCC) (MAT2_B2001-11)
• explore quadratic, exponential, and rational equations by analyzing graphical representations (QCC) (MAT2_B2001-12)
• define slope as rate of change and calculate slope given a change in two variables (QCC) (MAT2_B2003-1)
• solve and apply linear equations and inequalities using various methods (QCC, SAT) (MAT2_B2003-2)
• solve simple radical equations and problems (QCC, SAT) (MAT2_B2003-3)
• simplify and identify characteristics of polynomials (QCC) (MAT2_B2003-4)
Mathematics

B – Algebra (continued)
- recognize and write linear equations in two variables and identify graphs of lines, including special cases such as vertical, horizontal, parallel, and perpendicular lines (QCC) (MAT2_B2003-5)

C - Statistics
- graph ordered pairs and paired data (QCC, HSGT) (MAT2_C2001-13)
- analyze and represent data using tables, charts, and graphs (QCC, SAT) (MAT2_C2001-14)
- collect, organize, and record data obtained through investigation and experimentation (QCC) (MAT2_C2001-15)
- judge the validity of arguments (QCC) (MAT2_C2001-16)
- interpret and make predictions from graphical representations of data (QCC) (MAT2_C2003-6)
- conduct and interpret a compound probability experiment (QCC) (MAT2_C2003-7)
- fit lines to data and interpret linear graphs (QCC, SAT) (MAT2_C2003-8)

D - Functions and Relations
- investigate the concept of limit (MAT2_D2001-18)
- distinguish between relations and functions and identify domain and range (QCC) (MAT2_D2003-9)

E - Discrete Mathematics
- represent problem situations using discrete structures such as finite graphs and matrices (QCC) (MAT2_E2001-19)
- solve systems of equations using matrices (QCC) (MAT2_E2001-20)

F - Geometry from an Algebraic Perspective
- investigate and apply Pythagorean theorem and its converse (QCC) (MAT2_F2003-10)

INFORMAL GEOMETRY

A - Geometry from an Algebraic Perspective
- use graphs to determine sum and difference of vectors (QCC) (MAIG_A2003-1)
- analyze translations, rotations, and reflections of functions and relations and determine the effects on graphs and equations (QCC) (MAIG_A2003-2)
- determine volume and surface area using formulas (QCC) (MAIG_A2003-3)
- apply the Pythagorean theorem (QCC, HSGT, SAT) (MAIG_A2003-4)
- determine perimeter and area of polygons and irregular figures (QCC, HSGT, SAT) (MAIG_A2003-5)
- compare similar figures using scale factors (QCC, HSGT) (MAIG_A2003-6)
- apply size transformations and two-way stretches (QCC) (MAIG_A2003-7)
- identify, describe, and contract points, lines, planes, segments, and rays (QCC) (MAIG_A2003-8)
- identify and graph ordered pairs of numbers in the coordinate plane (QCC) (MAIG_A2003-9)
- apply the distance and midpoint formulas (QCC) (MAIG_A2003-10)
- find the slope of a line, write an equation of a line, and graph equations of lines (QCC) (MAIG_A2003-11)
- find the coordinates of the point of intersection of two lines, using algebra, graphing, and appropriate technology (QCC) (MAIG_A2003-12)
- use coordinate methods to explore, make conjectures, or prove properties of geometric figures, using tools such as algebra, graphing, and appropriate technology (QCC) (MAIG_A2003-13)
Mathematics

B - Geometry from a Synthetic Perspective
• write indirect proofs (QCC) (MAIG_B2003-14)
• apply rotations, reflections, and symmetry (QCC) (MAIG_B2003-15)
• apply transformation vectors (MAIG_B2003-16)
• determine the composites of transformations (QCC) (MAIG_B2003-17)
• identify isometries of geometric figures (QCC) (MAIG_B2003-18)
• interpret and draw three-dimensional objects (QCC) (MAIG_B2003-19)
• use transformational geometry to show congruency and similarity (QCC, HSGT, SAT) (MAIG_B2003-20)
• apply line and angle relationships (QCC, SAT) (MAIG_B2003-21)
• apply circle and angle relationships (QCC, SAT) (MAIG_B2003-22)
• investigate parallel and perpendicular lines (QCC, SAT) (MAIG_B2003-23)
• classify triangles and polygons (QCC) (MAIG_B2003-24)

C - Statistics
• judge the validity of arguments (QCC) (MAIG_C2003-25)

D - Probability
• explore and use theoretical probabilities (QCC) (MAIG_D2002-26)

E - Discrete Mathematics
• apply properties of logic (QCC) (MAIG_E2003-27)

F - Trigonometry
• solve problems using trigonometric ratios (QCC) (MAIG_F2003-28)
• find trigonometric ratios using right triangles (QCC) (MAIG_F2003-29)
• apply properties of special right triangles (QCC) (MAIG_F2003-30)

APPLIED ALGEBRA

A - Number and Number Relationships
• use estimation, conversion, and exact calculations in solving measurement problems using appropriate technology/instruments (QCC) (MAAP_A2003-1)
• compute with integers and rational numbers (QCC, HSGT, SAT) (MAAP_A2003-2)
• compute with exponential expressions (QCC, SAT) (MAAP_A2003-3)
• apply and calculate area, volume, and surface area of objects (QCC) (MAAP_A2003-4)

B - Algebra
• write, evaluate, and perform operations with algebraic expressions and formulas (QCC, SAT) (MAAP_B2003-5)
• solve and graph linear equations and inequalities in one and two variables and interpret the results in problem situations (QCC, SAT) (MAAP_B2003-6)
• use tables and graphs as tools to interpret expressions and equations (QCC, SAT) (MAAP_B2003-7)
• formulate linear equations and inequalities for given conditions (QCC, SAT) (MAAP_B2003-8)
• factor simple monomials and polynomials to solve problems (QCC) (MAAP_B2003-9)
• identify the characteristics of and perform operations with polynomials (QCC) (MAAP_B2003-10)
• simplify simple radical expressions and solve radical equations (QCC) (MAAP_B2003-11)

C - Geometry from an Algebraic Perspective
• analyze translations, rotations, and reflections of functions and relations and determine the effects on graphs and equations (QCC) (MAAP_C2003-12)
Mathematics

D - Statistics
• investigate normal distributions (QCC, SAT) (MAAP_D2003-13)
• investigate data transformations on graphs, measures of central tendency, and dispersion (SAT) (MAAP_D2003-14)
• judge the validity of arguments (QCC) (MAAP_D2003-15)
• graph ordered pairs (QCC, HSGT) (MAAP_D2003-16)
• use the mean, median, and mode to describe central tendencies and range to describe variability of a data set (QCC, HSGT, SAT) (MAAP_D2003-17)
• analyze and represent data using tables, charts, and graphs (MAAP_D2003-18)

E - Probability
• investigate the uses of probability (QCC, HSGT, SAT) (MAAP_E2003-19)
• use simple computer simulations to estimate probabilities and to introduce the concept of a random variable (QCC, SAT) (MAAP_E2003-20)
• use probability to determine odds and make predictions (QCC, HSGT, SAT) (MAAP_E2003-21)
• find and use theoretical and conditional probability (QCC) (MAAP_E2003-22)
• determine probabilities from area models (QCC, HSGT, SAT) (MAAP_E2003-23)
• count the number of ways an event can happen (QCC) (MAAP_E2003-24)

F - Functions and Relations
• solve, graph, and interpret both linear and non-linear systems (QCC, SAT) (MAAP_F2003-25)
• formulate, solve, and graph equations for variation (QCC) (MAAP_F2003-26)
• use graphs to write and solve linear equations (QCC, SAT) (MAAP_F2003-27)
• solve quadratic equations by graphing, factoring, using the quadratic formula, and interpret the results in problem situations (QCC) (MAAP_F2003-28)
• solve and graph simple nonlinear functions (QCC, SAT) (MAAP_F2003-29)
• define relations and linear functional relationships (QCC, SAT) (MAAP_F2003-30)
• identify patterns of functional models (QCC) (MAAP_F2003-31)
• identify functional relationships (QCC) (MAAP_F2003-32)
• determine maximum and minimum points of a graph (QCC, SAT) (MAAP_F2003-33)
• solve rational equations (QCC) (MAAP_F2003-34)

G - Discrete Mathematics
• represent problem situations using discrete structures such as finite graphs and matrices (QCC) (MAAP_G2003-35)
• solve systems of equations using matrices (QCC) (MAAP_G2003-36)

MATHEMATICAL MONEY MANAGEMENT

A - Net and Gross Income
• calculate total time worked from a timecard (QCC, HSGT, SAT, ACT) (MAMM_A2002-1)
• calculate gross pay using various methods (QCC, HSGT, SAT, ACT) (MAMM_A2002-2)
• compute net pay (QCC, HSGT, SAT, ACT) (MAMM_A2002-3)
• compute various taxes such as income taxes, property taxes, Social Security taxes, estate, and inheritance taxes (QCC, HSGT, SAT, ACT) (MAMM_A2002-4)
• discuss different types of taxes and how the funds are used (QCC) (MAMM_A2002-5)
• complete federal and state income tax forms for given data (QCC, SAT, ACT) (MAMM_A2002-6)
B - Budgeting

- prepare a budget for a given income on a weekly, monthly, and annual basis (QCC) (MAMM_B2002-7)
- identify and compare various pay periods (QCC) (MAMM_B2002-8)
- explore and compare various methods of personal record keeping (QCC) (MAMM_B2002-9)
- investigate how income and personal goals affect financial planning and decisions (QCC) (MAMM_B2002-10)
- compare costs of various forms of transportation and lodging (QCC, HSGT) (MAMM_B2002-11)
- select a leisure-time activity and investigate related expenses (QCC, HSGT) (MAMM_B2002-12)
- plan a vacation using a given amount of money (QCC, HSGT) (MAMM_B2002-13)

C - Banking and Investing

- compare various banking institutions and services provided by each (QCC) (MAMM_C2002-14)
- model transactions associated with checking and savings accounts (QCC, HSGT) (MAMM_C2002-15)
- reconcile a checking account (QCC, SAT, ACT) (MAMM_C2002-16)
- compare and contrast various methods of saving and investing money (QCC, HSGT) (MAMM_C2002-17)
- identify sources of retirement income and model a sample plan for retirement income (QCC) (MAMM_C2002-18)
- solve problems related to saving and investing money (QCC, HSGT, SAT, ACT) (MAMM_C2002-19)
- calculate simple and compound interest (QCC, HSGT, SAT, ACT) (MAMM_C2002-20)
- compare different lending institutions with respect to services, costs, and types of loans (QCC) (MAMM_C2002-21)
- compute interest and service charges for various types of loans (QCC, HSGT, SAT, ACT) (MAMM_C2002-22)
- explain how a credit rating is established and how it affects the ability to obtain loans (QCC) (MAMM_C2002-23)

D - Housing

- determine the percentage of income available for monthly rent or mortgage payment (QCC) (MAMM_D2002-24)
- investigate costs associated with renting (QCC) (MAMM_D2002-25)
- compute the amount of down payment required to purchase a house/condominium (QCC, SAT, ACT) (MAMM_D2002-26)
- calculate monthly mortgage payment and monthly escrow amount (QCC, SAT, ACT) (MAMM_D2002-27)
- calculate total interest paid on the loan (QCC, HSGT, SAT, ACT) (MAMM_D2002-28)
- estimate the closing costs associated with buying a house (QCC, HSGT, SAT, ACT) (MAMM_D2002-29)
- compare and contrast cost of service providers (QCC) (MAMM_D2002-30)
- compare and contrast efficiency ratings for large and small appliances (QCC) (MAMM_D2002-31)
- identify advantages and disadvantages of property ownership (QCC) (MAMM_D2002-32)

E - Purchasing

- identify various means used to sell products and services (QCC, HSGT) (MAMM_E2002-33)
- explore instances of deceptive advertising, deceptive packaging, hard-sell tactics, and masked credit practices (QCC, HSGT) (MAMM_E2002-34)
- compute sales tax, total purchase price, and change received in a cash purchase (QCC, HSGT, SAT, ACT) (MAMM_E2002-35)
- examine advantages and disadvantages of extended warranties (QCC) (MAMM_E2002-36)
- calculate discount, successive discounts, and sale price of an item (QCC, HSGT, SAT, ACT) (MAMM_E2002-37)
- compare unit-price to do comparison-shopping and determine the better buy (QCC, HSGT) (MAMM_E2002-38)
- complete a catalog order form and calculate the total cost (QCC, HSGT) (MAMM_E2002-39)
- compare various credit plans to determine best choice for the specific need (QCC) (MAMM_E2002-40)
- compute the finance charge for a charge account by unpaid balance method and average daily balance method (QCC, HSGT, SAT, ACT) (MAMM_E2002-41)
- calculate the finance charge and monthly payment on an installment plan (QCC, HSGT, SAT, ACT) (MAMM_E2002-42)
- explain advantages and disadvantages of using a credit card (QCC) (MAMM_E2002-43)
- calculate cost related to buying and owning a car (QCC, HSGT, SAT, ACT) (MAMM_E2002-44)
- explain advantages and disadvantages of owning or leasing a vehicle (QCC) (MAMM_E2002-45)
E – Purchasing (continued)
- identify resources and procedures in the event of financial difficulty (QCC) (MAMM_E2002-46)
- interpret rights and responsibilities involved with leases, warranties, guarantees, and sales contracts (QCC) (MAMM_E2002-47)
- identify agencies that deal with consumer problems (QCC) (MAMM_E2002-48)

F - Insurance
- compare different kinds of life insurance and calculate premiums (QCC) (MAMM_F2002-49)
- compute health insurance premiums and expenses incurred when a claim is filed (QCC, SAT, ACT) (MAMM_F2002-50)
- investigate forms of insurance, such as dental, disability, automobile, and accidental death (QCC) (MAMM_F2002-51)
BIOLOGY

A - Characteristics of Science
- design and conduct scientific investigations (GPS, HSGT, ACT) (SCBI_A2005-1)
- apply standard safety practices for all classroom laboratory and field investigations (GPS, HSGT) (SCBI_A2005-2)
- use technology to collect, observe, measure, and manipulate data and findings (GPS, HSGT, ACT) (SCBI_A2005-3)
- use valid critical assumptions to draw conclusions (GPS, HSGT, ACT) (SCBI_A2005-4)
- apply computation and skills necessary for analyzing data and developing conclusions (GPS, HSGT) (SCBI_A2005-5)
- communicate scientific investigations clearly (GPS, HSGT) (SCBI_A2005-6)
- read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS, HSGT) (SCBI_A2005-7)
- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (GPS) (SCBI_A2006-1)

B - Academic Knowledge
- analyze the relationship between structures and functions in living cells (GPS, HSGT) (SCBI_B2005-8)
- analyze how biological traits are passed on to successive generations (GPS, HSGT) (SCBI_B2005-9)
- examine the relationship between unicellular and multicellular organisms and the increasing complexity of systems (GPS, HSGT) (SCBI_B2005-10)
- evaluate the dependence of all organisms on one another and the flow of energy and matter within their ecosystems (GPS, HSGT) (SCBI_B2005-11)
- evaluate the role of natural selection in the development of the theory of evolution (GPS, HSGT) (SCBI_B2005-12)

CHEMISTRY

A - Characteristics of Science
- design and conduct scientific investigations (GPS, HSGT, ACT) (SCCH_A2005-1)
- apply standard safety practices for all classroom laboratory and field investigations (GPS, HSGT) (SCCH_A2005-2)
- use technology to collect, observe, measure, and manipulate data and findings (GPS, HSGT, ACT) (SCCH_A2005-3)
- use valid critical assumptions to draw conclusions (GPS, ACT) (SCCH_A2005-4)
- apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS, HSGT, ACT) (SCCH_A2005-5)
- communicate scientific investigations clearly (GPS, HSGT, ACT) (SCCH_A2005-6)
- read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS, HSGT) (SCCH_A2005-7)
- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (GPS) (SCCH_A2006-1)

B - Academic Knowledge
- analyze the nature of matter and its classifications (GPS, HSGT) (SCCH_B2005-8)
- evaluate how the Law of Conservation of Matter is used to determine chemical composition in compounds and chemical reactions (GPS, HSGT) (SCCH_B2005-9)
- use the modern atomic theory to explain the characteristics of atoms (GPS, HSGT) (SCCH_B2005-10)
- use the organization of the periodic table of elements to predict the properties of elements (GPS, HSGT) (SCCH_B2005-11)
- predict how various factors affect the rate of a chemical reaction (GPS, HSGT) (SCCH_B2005-12)
**B - Academic Knowledge (continued)**

- evaluate the motion and behavior of atoms and molecules in chemical and physical processes (GPS, HSGT) (SCCH_B2005-13)
- analyze properties that describe solutions and the behavior of acids and bases (GPS, HSGT) (SCCH_B2005-14)

**PHYSICS**

**A - Characteristics of Science**

- design and conduct scientific investigations (GPS, HSGT, ACT) (SCPH_A2005-1)
- apply standard safety practices for all classroom laboratory and field investigations (GPS, HSGT) (SCPH_A2005-2)
- use technology to collect, observe, measure, and manipulate data and findings (GPS, HSGT) (SCPH_A2005-3)
- use valid critical assumptions to draw conclusions (GPS, HSGT, ACT) (SCPH_A2005-4)
- apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS, HSGT, ACT) (SCPH_A2005-5)
- communicate scientific investigations clearly (GPS, HSGT) (SCPH_A2005-6)
- read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS, HSGT) (SCPH_A2005-7)
- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (GPS) (SCPH_A2006-1)

**B - Mathematical Skills**

- apply mathematical skills and processes to analyze and solve scientific problems (GPS, HSGT) (SCPH_B2005-8)

**C - Mechanics**

- analyze straight-line motion both vertically and horizontally (GPS, HSGT) (SCPH_C2005-9)
- analyze the motion of an object moving in two dimensions (GPS, HSGT) (SCPH_C2005-10)
- explain and apply Newton’s Three Laws of Motion (GPS, HSGT) (SCPH_C2005-11)
- analyze forces in static and dynamic situations (GPS, HSGT) (SCPH_C2005-12)
- explain the relationship between work and power (using narrative and mathematical descriptions) and apply to realistic situations (GPS, HSGT) (SCPH_C2005-14)
- apply the Law of Conservation of Energy to describe conceptually and solve mathematically the conversions between potential and kinetic energy (GPS, HSGT) (SCPH_C2005-15)
- explain the relationship between momentum and impulse (using narrative and mathematical descriptions) and apply to realistic situations (GPS, HSGT) (SCPH_C2005-16)
- relate the effects of thermal energy to kinetic molecular theory (GPS, HSGT) (SCPH_C2005-17)
- identify and describe a system of torque-producing forces acting in equilibrium (GPS, HSGT) (SCPH_C2005-18)
- describe the corrections of Newtonian physics given by quantum mechanics and relativity when matter is very small, moving fast compared to the speed of light, or very large (GPS) (SCPH_C2008-1)

**D - Electricity and Magnetism**

- analyze and describe electrostatics (GPS, HSGT) (SCPH_D2005-19)
- explain the concept of electric potential (SCPH_D2005-20)
- calculate the values of current, voltage, resistance, and power in various circuits using Ohm’s Law (GPS, HSGT) (SCPH_D2005-21)
- analyze (via laboratory analysis) the properties of magnetic fields and their relationship to electric fields (GPS, HSGT) (SCPH_D2005-22)
E - Waves
- analyze the properties of waves (GPS, HSGT) (SCPH_E2005-23)
- analyze the properties of sound (GPS, HSGT) (SCPH_E2005-24)
- analyze the properties of light and optics (GPS, HSGT) (SCPH_E2005-25)

F - Nuclear Physics
- analyze nuclear decay and energy production by means of fission and fusion (GPS, HSGT) (SCPH_F2005-26)

ANATOMY AND PHYSIOLOGY

A - Characteristics of Science
- demonstrate accepted methods, processes, and procedures for conducting anatomical and physiological studies (GPS) (SCHA_A2007-1)
- apply standard safety practices for all classroom laboratory and field investigations (GPS) (SCHA_A2007-2)
- use technology to collect, observe, measure, and organize data and findings (GPS) (SCHA_A2007-3)
- use valid critical assumptions to draw conclusions (GPS) (SCHA_A2007-4)
- apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS) (SCHA_A2007-5)
- communicate scientific investigations clearly (GPS) (SCHA_A2007-6)
- read scientific materials to establish context for subject matter, develop vocabulary and to be aware of current research (GPS) (SCHA_A2007-7)

B - Academic Knowledge
- explain how homeostasis maintains the intricate balance of the internal environment of the human body (GPS) (SCHA_B2007-8)
- describe the relationship between the anatomy of the body and the physiological processes (GPS) (SCHA_B2007-9)
- use standard terminology to name and describe body features and positions (GPS) (SCHA_B2007-10)
- explain that the study of human physiology focuses on the biochemical makeup of the body and the interactions of the metabolic processes (GPS) (SCHA_B2007-11)
- describe how structure and function are related in terms of cell and tissue types (GPS) (SCHA_B2007-12)
- analyze the interdependence of the integumentary, skeletal, and muscular systems as they relate to the protection, support, and movement of the human body (GPS) (SCHA_B2007-13)
- assess the integration and coordination of body functions and their dependence on the endocrine and nervous systems to regulate physiological processes (GPS) (SCHA_B2007-14)
- recognize the role of the cardiovascular system in transport and exchange of materials throughout the body and its contribution to all body functions (GPS) (SCHA_B2007-15)
- examine the general defense mechanisms of the immune and lymphatic systems (GPS) (SCHA_B2007-16)
- explain the role of the respiratory system in gas exchange (GPS) (SCHA_B2007-17)
- illustrate the steps involved in the ingestion and digestion of food, the absorption of nutrients, and the elimination of undigested substances (GPS) (SCHA_B2007-18)
- examine the processes involved in the elimination of nitrogenous wastes and the maintenance of fluid balance (GPS) (SCHA_B2007-19)
- examine various conditions that change normal body functions (e.g., tissue rejection, allergies, injury, diseases and disorders) and the body’s response to them (GPS) (SCHA_B2007-20)
- investigate the effects of aging on body systems (GPS) (SCHA_B2007-21)
- analyze the role of the reproductive system as it pertains to the growth and development of humans (GPS) (SCHA_B2007-22)
**ASTRONOMY**

**A - Academic Skills**
- use traditional reference materials, the Internet, and available software to research astronomy topics (QCC) (SCAS_A2003-1)
- define, measure, and compare distances in space as well as terrestrial distances using accepted methods and units (QCC) (SCAS_A2003-2)
- investigate early methods of observation of the cyclical pattern of the celestial bodies (QCC) (SCAS_A2003-3)

**B - Academic Knowledge**
- describe the history of astronomy from earliest known observations to present-day events (QCC) (SCAS_B2003-4)
- use the concept of gravity with the combined motions of Earth, moon, and sun to describe astronomical events (QCC) (SCAS_B2003-5)
- investigate the relationship between astronomical cycles and man’s measurement of time (QCC) (SCAS_B2003-6)
- use safe methods of observing the sun (QCC) (SCAS_B2003-7)
- explain the characteristics of our sun, including location, apparent movement, distance from Earth, and impact on Earth (QCC) (SCAS_B2003-8)
- examine the source of the sun’s energy (QCC) (SCAS_B2003-9)
- describe the moon, its features, theories of origin, and its effects on Earth (QCC) (SCAS_B2003-10)
- name and describe the inner planets (SCAS_B2003-11)
- compare and contrast the motion of celestial bodies (QCC) (SCAS_B2003-12)
- name and describe the outer planets (SCAS_B2003-13)
- describe stellar motion (QCC) (SCAS_B2003-14)
- explain the life cycle and energy source of stars (QCC) (SCAS_B2003-15)
- demonstrate effective use of the system of categorizing stars (QCC) (SCAS_B2003-16)
- compare our galaxy as a star system to other star systems in the universe (QCC) (SCAS_B2003-17)
- describe the characteristics of other galaxies in the universe (QCC) (SCAS_B2003-18)
- discuss past and current theories of the origin of the universe, and propose others (QCC) (SCAS_B2003-19)
- explain the tools and techniques to observe the universe (SCAS_B2003-20)

**BIOENGINEERING**

**A - Characteristics of Science**
- design and conduct scientific investigations (SCBE_A2009-1)
- apply standard safety practices for all classroom laboratory and field investigations (SCBE_A2009-2)
- use technology to collect, observe, measure, and manipulate data and findings (SCBE_A2009-3)
- use valid critical assumptions to draw conclusions (SCBE_A2009-4)
- apply computation and skills necessary for analyzing data and developing conclusions (SCBE_A2009-5)
- communicate scientific investigations clearly (SCBE_A2009-6)
- read scientific materials to establish context for subject matter, to develop vocabulary, and to be aware of current research (SCBE_A2009-7)
- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (SCBE_A2009-8)

**B - Academic Knowledge**
- use Standard Laboratory Operating Procedures (SOP) (SCBE_B2009-9)
- define bioengineering and explain its application in society (SCBE_B2009-10)
- examine the ethical and legal issues arising from the application of bioengineering (SCBE_B2009-11)
- describe career opportunities in the field of bioscience (SCBE_B2009-12)
B - Academic Knowledge (continued)
• examine how basic chemistry concepts affect living organisms (SCBE_B2009-13)
• apply technologies used in the life science industry (SCBE_B2009-14)
• explore the development and delivery of bioengineering to the marketplace (SCBE_B2009-15)

EARTH SYSTEMS

A - Characteristics of Science
• discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (GPS) (SCEG_A2007-1)
• design and conduct scientific investigations (GPS) (SCEG_A2007-2)
• apply standard safety practices for all classroom laboratory and field investigations (GPS) (SCEG_A2007-3)
• use technology to collect, observe, measure, and organize data and findings (GPS) (SCEG_A2007-4)
• use valid critical assumptions to draw conclusions (GPS) (SCEG_A2007-5)
• apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS) (SCEG_A2007-6)
• communicate scientific investigations clearly (GPS) (SCEG_A2007-7)
• read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS) (SCEG_A2007-8)

B - Earth Systems
• describe the early evolution of Earth and the solar system, including the formation of Earth’s solid layers (core, mantle, crust), the distribution of major elements, the origin of internal heat sources, and the mechanism by which heat transfer drives plate tectonics (GPS) (SCEG_B2007-9)
• explain how the composition of Earth’s crust, mantle, and core is determined and compare it to that of other solar system objects (GPS) (SCEG_B2007-10)
• describe how the decay of radioactive isotopes is used to determine the age of rocks, Earth, and solar system (GPS) (SCEG_B2007-11)
• describe how Earth acquired its initial oceans and atmosphere (GPS) (SCEG_B2007-12)
• relate the cycling of materials in the geochemical cycles to the availability of Earth’s natural resources (GPS) (SCEG_B2007-13)
• classify rocks as sedimentary, igneous, and metamorphic and distinguish between rocks and minerals (SCEG_B2007-14)

C - Plate Tectonics and Geologic Features
• distinguish among types of plate tectonic settings produced by plates diverging, converging, and sliding past each other (GPS) (SCEG_C2007-15)
• relate modern and ancient geologic features to each kind of plate tectonic setting (GPS) (SCEG_C2007-16)
• relate certain geologic hazards to specific plate tectonic settings (GPS) (SCEG_C2007-17)
• associate specific plate tectonic settings with the production of particular groups of igneous and metamorphic rocks and mineral resources (GPS) (SCEG_C2007-18)
• evaluate evidence that supports the theory of plate tectonics (GPS) (SCEG_C2007-19)

D - Surface Processes
• describe how surface water and groundwater act as major agents of physical and chemical weathering (GPS) (SCEG_D2007-20)
• explain how soil results from weathering and biological processes acting on parent rock (GPS) (SCEG_D2007-21)
• describe processes and hazards associated with both sudden and gradual mass wasting (GPS) (SCEG_D2007-22)
• relate past and present actions of ice, wind, and water to landform distribution and landscape evolution (GPS) (SCEG_D2007-23)
• explain processes that result in the formation of sedimentary rock (GPS) (SCEG_D2007-24)
E - Geologic History

- describe and apply principles of relative age (superposition, original horizontality, cross-cutting relations, and original lateral continuity) and describe how unconformities form (GPS) (SCEG_E2007-25)
- interpret the geologic history of a succession of rocks and unconformities (GPS) (SCEG_E2007-26)
- apply the principle of uniformitarianism to relate sedimentary rock associations and their fossils to the environments in which the rocks were deposited (GPS) (SCEG_E2007-27)
- explain how sedimentary rock units are correlated within and across regions by a variety of methods (e.g., geologic map relationships, the principle of fossil succession, radiometric dating, and paleomagnetism) (GPS) (SCEG_E2007-28)
- use geologic maps and stratigraphic relationships to interpret major events in Earth history (e.g., mass extinction, major climatic change, tectonic events) (GPS) (SCEG_E2007-29)

F - Weather and Climate

- explain how latitudinal variations in solar heating create atmospheric and ocean currents that redistribute heat globally (GPS) (SCEG_F2007-30)
- explain the relationship between air masses and the surfaces over which they form (GPS) (SCEG_F2007-31)
- relate weather patterns to interactions among ocean currents, air masses, and topography (GPS) (SCEG_F2007-32)
- describe how temperature and precipitation produce the pattern of climate regions (classes) on Earth (GPS) (SCEG_F2007-33)
- describe the hazards associated with extreme weather events and climate change (e.g., hurricanes, tornadoes, El Niño/La Niña, and global warming) (GPS) (SCEG_F2007-34)
- explain the Earth/Sun/Moon dynamic and how this relationship influences tidal events, eclipses, and climatic changes (GPS) (SCEG_F2007-35)

G - Life and Earth Interactions

- relate the nature and distribution of life on Earth, including humans, to the chemistry and availability of water (GPS) (SCEG_G2007-36)
- relate the distribution of biomes (terrestrial, freshwater, and marine) to climate regions through time (GPS) (SCEG_G2007-37)
- relate the distribution of organisms on Earth to the historical process of continental drift and plate tectonics (GPS) (SCEG_G2007-38)
- explain how geological and ecological processes interact through time to cycle matter and energy, and how human activity alters the rates of these processes (e.g., fossil fuel formation and combustion) (GPS) (SCEG_G2007-39)
- describe how fossils provide a record of shared ancestry, evolution, and extinction that is best explained by the mechanism of natural selection (GPS) (SCEG_G2007-40)
- identify the evolutionary innovations that most profoundly shaped Earth systems: photosynthetic prokaryotes and the atmosphere, multicellular animals and marine environments, and land plants and terrestrial environments (GPS) (SCEG_G2007-41)

ENVIRONMENTAL SCIENCE

A - Characteristics of Science

- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (GPS) (SCES_A2007-1)
- design and conduct scientific investigations (GPS) (SCES_A2007-2)
- apply standard safety practices for all classroom laboratory and field investigations (GPS) (SCES_A2007-3)
- use technology to collect, observe, measure, and organize data and findings (GPS) (SCES_A2007-4)
- use valid critical assumptions to draw conclusions (GPS) (SCES_A2007-5)
- apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS) (SCES_A2007-6)
- communicate scientific investigations clearly (GPS) (SCES_A2007-7)
- read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS) (SCES_A2007-8)
B - Academic Knowledge
- explain that Earth is one interconnected system (GPS) (SCES_B2007-9)
- evaluate the effects of human activities and technology on ecosystems (GPS) (SCES_B2007-10)
- describe stability and change in ecosystems (GPS) (SCES_B2007-11)
- identify the development, characteristics, and distribution of biomes (GPS) (SCES_B2007-12)
- investigate various forms of energy resources and the significance of conservation to the environment (GPS) (SCES_B2007-13)
- identify major pollutants and their effect on the environment (SCES_B2007-14)
- relate the properties of water to its use, pollution, and conservation (SCES_B2007-15)
- analyze the actions of the earth and humans and how each impacts the development and movement of soils (SCES_B2007-16)
- investigate the effects of human activity on local and global sustainability (SCES_B2007-17)
- investigate various types of waste, waste generation, waste disposal, and management problems (SCES_B2007-18)
- discuss the process of developing national and global environmental standards (SCES_B2007-19)

FORENSIC SCIENCE

A - Characteristics of Science
- design and conduct scientific investigations (GPS, HSGT, ACT) (SCFS_A2008-1)
- apply standard safety practices for all classroom, laboratory, and field investigations (GPS, HSGT, PSAT) (SCFS_A2008-2)
- use technology to collect, observe, measure, and organize data and present findings (GPS, HSGT, ACT) (SCFS_A2008-3)
- use valid critical assumptions to draw conclusions (GPS, ACT) (SCFS_A2008-4)
- apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS, HSGT, ACT) (SCFS_A2008-5)
- communicate scientific investigations clearly (GPS, HSGT, ACT) (SCFS_A2008-6)
- read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS, HSGT) (SCFS_A2008-7)
- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in an effort to understand how the world works (GPS) (SCFS_A2008-8)

B - Academic Knowledge and Skills
- describe how forensic science is the application of science to the law (SCFS_B2008-9)
- investigate the use of the body as evidence (SCFS_B2008-10)
- investigate the role of entomology in determining time of death (SCFS_B2008-11)
- describe the role of the forensic investigator at the crime scene and in the collection of evidence (SCFS_B2008-12)
- investigate physical evidence involving glass (SCFS_B2008-13)
- investigate physical evidence involving soil and sand (SCFS_B2008-14)
- discuss the identification and comparison process utilized in forensic hair analysis (SCFS_B2008-15)
- discuss the identification and comparison process utilized in fabric, fiber, and paint analysis (SCFS_B2008-16)
- investigate forensic evidence of fingerprints, footprints, and other impressions (SCFS_B2008-17)
- investigate forensic applications of various tool and firearm evidence (SCFS_B2008-18)
- investigate how document analysis is used in criminalistics (SCFS_B2008-19)
- investigate physical evidence involving drugs and poisons (SCFS_B2008-20)
- investigate physical evidence involving arson and explosives (SCFS_B2008-21)
- investigate how blood evidence is analyzed and used in criminalistics (SCFS_B2008-22)
- investigate how DNA evidence is analyzed and used in criminalistics (SCFS_B2008-23)
- investigate how skeletal and teeth evidence is analyzed and used in criminalistics (SCFS_B2008-24)
- discuss applications of criminalistics to society, the criminal justice system, international relations, psychology, literature, and journalism (SCFS_B2008-25)

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B - **Academic Knowledge and Skills (continued)**
- investigate current and historic criminal cases as they apply to the learning and study of forensic science (SCFS_B2008-26)
- apply knowledge of evidence to crime scene analysis (SCFS_B2008-27)
- describe the use of computer databases in forensic investigations (SCFS_B2008-28)
- describe new forensic technologies (SCFS_B2008-29)
- discuss current and historic criminal cases as they apply to the study of forensic science (SCFS_B2008-30)
- apply statistical analysis to forensic investigation (SCFS_B2008-31)

**MICROBIOLOGY**

A - **Academic Skills**
- design and conduct a full scientific investigation (QCC, ACT) (SCMB_A2003-1)
- identify and use traditional reference materials to explore background and historical information regarding a scientific concept (QCC) (SCMB_A2003-2)
- use technology to manipulate, communicate, and transmit data and findings (SCMB_A2003-3)

B - **Academic Knowledge**
- recognize the impact of the invention of the microscope to the field of microbiology (QCC) (SCMB_B2003-4)
- discriminate between abiogenesis and biogenesis (QCC) (SCMB_B2003-5)
- identify the germ theory (QCC) (SCMB_B2003-6)
- apply proper microscopic techniques when preparing microscope slides (QCC) (SCMB_B2003-7)
- identify and control variables in order to maintain pure bacterial cultures (QCC) (SCMB_B2003-8)
- assess the effectiveness of physical and chemical agents on controlling bacterial growth (QCC) (SCMB_B2003-9)
- analyze common microbial diseases (QCC) (SCMB_B2003-10)
- evaluate different aseptic techniques (QCC) (SCMB_B2003-11)
- compare and contrast cellular differences that are used in the classification of microbes (QCC) (SCMB_B2003-12)
- distinguish the characteristics of viruses (QCC) (SCMB_B2003-13)
- analyze the societal and economic impact of viruses (QCC) (SCMB_B2003-14)
- identify and use disease terminology (QCC) (SCMB_B2003-15)
- analyze major industrial processes involving foods (QCC) (SCMB_B2003-16)
- relate methods of food-processing and storage to microbial growth (QCC) (SCMB_B2003-17)
- evaluate the role of microorganisms in agriculture (QCC) (SCMB_B2003-18)
- relate microorganisms to water quality and waste-water treatment (QCC) (SCMB_B2003-19)

**OCEANOGRAPHY**

A - **Academic Skills**
- design and conduct scientific investigations (QCC, ACT) (SCOC_A2003-1)
- utilize standard safety practices for laboratory or field investigations (QCC) (SCOC_A2003-2)
- use technology to collect, manipulate, and communicate data and findings (QCC) (SCOC_A2003-3)
- regularly integrate new and prior knowledge using a variety of formats with an emphasis on writing (SCOC_A2003-4)

B - **Academic Knowledge**
- explain the origins of the earth and oceans (QCC) (SCOC_B2003-5)
- explain the theory of global plate tectonics and the development of marine provinces (QCC) (SCOC_B2003-6)
- describe coral reef development, distinguishing between the types of reef systems (QCC) (SCOC_B2003-7)
B - **Academic Knowledge (continued)**
- distinguish between the types of marine sediments (QCC) (SCOC_B2003-8)
- identify the properties of water (QCC) (SCOC_B2003-9)
- investigate salinity distributions in seawater (QCC) (SCOC_B2003-10)
- compare the densities of prepared samples of ocean and fresh water (QCC) (SCOC_B2003-11)
- explain light and sound propagation of seawater (QCC) (SCOC_B2003-12)
- determine the effect of the atmosphere on seawater (QCC) (SCOC_B2003-13)
- demonstrate the Coriolis effect and its relation to the movement of air and water on the earth (QCC) (SCOC_B2003-14)
- describe the atmosphere’s greenhouse effect and implications of this effect for the future (QCC) (SCOC_B2003-15)
- distinguish between the various types of ocean circulation (QCC) (SCOC_B2003-16)
- demonstrate surface currents (QCC) (SCOC_B2003-17)
- explain Southern Oscillation Events (SCOC_B2003-18)
- demonstrate the characteristics of a wave and relate to ocean phenomena (QCC) (SCOC_B2003-19)
- identify the forces that cause tides (QCC) (SCOC_B2003-20)
- identify general characteristics of coastal waters, estuaries, wetlands, lagoons, and marginal seas (QCC) (SCOC_B2003-21)
- distinguish among the major characteristics of marine biozones (QCC) (SCOC_B2003-22)
- describe the distribution of life in the oceans (QCC) (SCOC_B2003-23)
- describe primary production, energy transfer, and recycling of matter (QCC) (SCOC_B2003-24)
- investigate ozone depletion and phytoplankton production (SCOC_B2003-25)
- identify marine animals found in the pelagic and benthic ocean (SCOC_B2003-26)
- interpret group behavior of animals in the pelagic ocean (SCOC_B2003-27)
- analyze the effects of fishing, mariculture, desalination, pollution, and extracting resources on the ocean environment (QCC) (SCOC_B2003-28)

PHYSICAL SCIENCE

A - **Characteristics of Science**
- design and conduct scientific investigations (GPS, HSGT, ACT) (SCPS_A2005-1)
- apply standard safety practices for all classroom laboratory and field investigations (GPS, HSGT) (SCPS_A2005-2)
- use technology to collect, observe, measure, and manipulate data and findings (GPS, HSGT, ACT) (SCPS_A2005-3)
- use valid critical assumptions to draw conclusions (GPS, ACT) (SCPS_A2005-4)
- apply computation and estimation skills necessary for analyzing data and developing conclusions (GPS, HSGT, ACT) (SCPS_A2005-5)
- communicate scientific investigations clearly (GPS, HSGT, ACT) (SCPS_A2005-6)
- read scientific materials to establish context for subject matter, develop vocabulary, and to be aware of current research (GPS, HSGT) (SCPS_A2005-7)
- discuss the importance of curiosity, honesty, openness, and skepticism in science and exhibit these traits in efforts to understand how the world works (GPS) (SCPS_A2006-1)

B - **Mathematical Skills**
- apply mathematical skills and processes to analyze and solve scientific problems (SCPS_B2005-8)

C - **Mechanics**
- explain straight-line motion, both horizontally and vertically (GPS, HSGT) (SCPS_C2005-9)
- explain and apply Newton’s Three Laws of Motion (GPS, HSGT) (SCPS_C2005-10)
- investigate forces in static and dynamic situations (GPS, HSGT) (SCPS_C2005-11)
- explain Newton’s Law of Universal Gravitation (GPS, HSGT) (SCPS_C2005-12)
Science

C - Mechanics (continued)
- explain the relationship between work and power (using narrative and mathematical descriptions) and apply to realistic situations (GPS, HSGT) (SCPS_C2005-13)
- explain and apply the Law of Conservation of Energy (GPS, HSGT) (SCPS_C2005-14)
- relate the effects of thermal energy to kinetic molecular theory (GPS, HSGT) (SCPS_C2005-15)

D - Electricity and Magnetism
- investigate the properties of static electricity (GPS, HSGT) (SCPS_D2005-16)
- analyze (via laboratory analysis) the properties of magnetic fields and their relationship to electric fields (GPS, HSGT) (SCPS_D2005-17)

E - Waves
- investigate the properties of waves (GPS, HSGT) (SCPS_E2005-18)
- investigate the properties of sound (GPS, HSGT) (SCPS_E2005-19)
- investigate the properties of light (GPS, HSGT) (SCPS_E2005-20)
- analyze the properties of light using optics (SCPS_E2005-21)

F - Properties of Matter
- investigate current understanding of the atom (GPS, HSGT) (SCPS_F2005-22)
- analyze the nature of matter, its classifications, and its system for naming (GPS, HSGT) (SCPS_F2005-23)
- explain the characteristics and components of radioactivity (GPS, HSGT) (SCPS_F2005-24)
- analyze the arrangement of the periodic table (GPS, HSGT) (SCPS_F2005-25)
- compare and contrast the phases of matter as they relate to atomic and molecular motion (GPS, HSGT) (SCPS_F2005-26)
- analyze the properties of solutions (GPS, HSGT) (SCPS_F2005-27)

SCIENCE, TECHNOLOGY AND SOCIETY

A - Academic Skills
- recognize a problem exists and define the problem in scientific terms (QCC) (SCST_A2003-1)
- develop questions, hypotheses, and experimental procedures appropriate to a given problem (QCC) (SCST_A2003-2)
- demonstrate skills to gather quantitative and qualitative data following appropriate safety procedures (QCC) (SCST_A2003-3)
- organize, interpret, and communicate data (e.g., tables, graphs, calculations, etc.) obtained by observation and experimentation (QCC) (SCST_A2003-4)
- analyze experimental data by applying and/or testing mathematical relationships in order to formulate appropriate inferences and conclusions (QCC) (SCST_A2003-5)
- demonstrate effective use of a systematic research process and appropriate sources to solve problems and make decisions about issues (QCC) (SCST_A2003-6)

B - Academic Knowledge
- identify and describe interrelationships among science, technology, and society (SCST_B2003-7)

C - Transportation
- identify examples of matter and energy changes within different levels of the environment in terms of the Law of Conservation of Matter and Laws of Thermodynamics (QCC) (SCST_C2003-8)
- evaluate the various political factors involved in acquisition and management of resources (QCC) (SCST_C2003-9)
- identify current global conditions concerning natural resources using a variety of media sources (SCST_C2003-10)
- predict future resource supplies (QCC) (SCST_C2003-11)
- recognize the nature, extent, and impact of environmental pollution (QCC, PSAT) (SCST_C2003-12)
- describe the ways in which individuals, as well as groups of citizens, can reduce pollution (QCC) (SCST_C2003-13)
C – Transportation (continued)

- examine various methods used for prevention and/or control of pollution (QCC) (SCST_C2003-14)
- evaluate the influence of human activities on the environment (QCC) (SCST_C2003-15)
- describe the roles of various government agencies and analyze major legislation regarding environmental protection (QCC) (SCST_C2003-16)
- recognize the limitations of fossil fuels and list alternative energy resources for future consumption (SCST_C2003-17)
- discuss the advantages and disadvantages of the automobile upon our lifestyles and environment (SCST_C2003-18)

D - Food and Natural Resources

- define the nature and extent of the environment (QCC) (SCST_D2003-19)
- identify abiotic and biotic factors in various environments (QCC) (SCST_D2003-20)
- trace the relationship between the pathway of energy through food chains and food webs and describe the cycling of matter in our environment (QCC) (SCST_D2003-21)
- explain the natural factors that contribute to change and those factors that tend to promote stability in ecosystems (QCC) (SCST_D2003-22)
- list various methods used to conserve energy and water supplies (SCST_D2003-23)

E - Communication Technologies

- identify the technologies that involve communication (QCC) (SCST_E2003-24)
- summarize the effects increased communication speed and distance have had on the world (QCC) (SCST_E2003-25)
- recognize the social, economic, and political implications of modern technology such as radio, television, space satellites, wave mechanics, and silicon chips (QCC) (SCST_E2003-26)

F - Wellness

- analyze the impact of technology on human wellness (QCC) (SCST_F2003-27)
- compare and contrast the categories of diseases (SCST_F2003-28)
- identify the advantages, disadvantages, and alternatives to animal research (SCST_F2003-29)
- identify factors which contribute to a physically wholesome person, including exercise, sleep, nutrition, and safety (SCST_F2003-30)
- describe the roles that genetic engineering plays in society (QCC) (SCST_F2003-31)
- describe the source and effect of toxins in the environment (QCC) (SCST_F2003-32)
- evaluate personal lifestyle, risk assessment, and stress management (SCST_F2003-33)
- understand the leading causes of death and the importance of immunizations and preventative care (SCST_F2003-34)
- create a balanced diet with the proper servings for each food group (SCST_F2003-35)
- understand food labels by converting grams to calories (SCST_F2003-36)
- analyze diets for fat, sugar, and sodium content (SCST_F2003-37)

G - Population and Space

- identify major needs and natural resources required by industrialized, technological societies (QCC) (SCST_G2003-38)
- classify natural resources into renewable/nonrenewable and limited/unlimited categories (SCST_G2003-39)
- define and give examples of depletion and degradation (SCST_G2003-40)
- explain the roles of agencies dealing with resource location, management, and conservation (QCC) (SCST_G2003-41)
- recognize the differences between developed and underdeveloped countries (QCC) (SCST_G2003-42)
- explain the general growth pattern of a natural population and graph data to determine its growth (QCC) (SCST_G2003-43)
- analyze how the human populations has changed and is currently changing (QCC) (SCST_G2003-44)
- explain current attempts at solving population growth problems and appraise the need for population control in the United States (QCC) (SCST_G2003-45)
- analyze the population growth in the United States, Georgia, and Gwinnett County (QCC) (SCST_G2003-46)
- identify the developments of modern technology and discuss their impact on human population growth (QCC) (SCST_G2003-47)
H - Local Studies
• research and describe current and future problems faced by local authorities (QCC) (SCST_H2003-48)
• suggest viable methods for averting or solving local problems (QCC) (SCST_H2003-49)
WORLD GEOGRAPHY

A - Map and Globe Skills
- use cardinal directions (GPS) (SSWG_A2007-1)
- use intermediate directions (GPS) (SSWG_A2007-2)
- use a letter/number grid system to determine location (GPS) (SSWG_A2007-3)
- compare and contrast the categories of natural, cultural, and political features found on maps (GPS) (SSWG_A2007-4)
- use customary and metric map scales to determine distance on a map (GPS) (SSWG_A2007-5)
- use map key/legend to acquire information from historical, physical, political, resource, product, and economic maps (GPS) (SSWG_A2007-6)
- use a map to explain the impact of geography on historical and current events (GPS) (SSWG_A2007-7)
- draw conclusions and make generalizations based on information from maps (GPS) (SSWG_A2007-8)
- use latitude and longitude to determine location (GPS) (SSWG_A2007-9)
- use graphic scales to determine distances on a map (GPS) (SSWG_A2007-10)
- compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSWG_A2007-11)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSWG_A2007-12)

B - Information Processing Skills
- compare similarities and differences (GPS) (SSWG_B2007-13)
- organize items chronologically (GPS) (SSWG_B2007-14)
- identify issues and/or problems and alternative solutions (GPS) (SSWG_B2007-15)
- distinguish between fact and opinion (GPS) (SSWG_B2007-16)
- identify main idea, detail, sequence of events, and cause and effect in a social studies context (GPS) (SSWG_B2007-17)
- identify and use primary and secondary sources (GPS) (SSWG_B2007-18)
- interpret timelines (GPS) (SSWG_B2007-19)
- identify social studies reference resources to use for a specific purpose (GPS) (SSWG_B2007-20)
- construct charts and tables (GPS) (SSWG_B2007-21)
- analyze artifacts (GPS) (SSWG_B2007-22)
- draw conclusions and make generalizations (GPS) (SSWG_B2007-23)
- analyze graphs and diagrams (GPS) (SSWG_B2007-24)
- translate dates into centuries, eras, or ages (GPS) (SSWG_B2007-25)
- formulate appropriate research questions (GPS) (SSWG_B2007-26)
- determine adequacy and/or relevancy of information (GPS) (SSWG_B2007-27)
- check for consistency of information (GPS) (SSWG_B2007-28)
- interpret political cartoons (GPS) (SSWG_B2007-29)

C - Physical Geography
- explain the physical aspects of geography (GPS) (SSWG_C2007-30)

D - Cultural Geography
- explain the cultural aspects of geography (GPS) (SSWG_D2007-31)

E - Elements of Geography
- apply the six essential elements of geography: the world in spatial terms, places and regions, physical systems, human systems, environment and society, and the uses of geography (GPS) (SSWG_E2007-32)
F - Interaction of Physical and Human Systems

- describe the interaction of physical and human systems that have shaped contemporary North Africa, Southwest Asia, and Central Asia (GPS) (SSWG_F2007-33)
- describe the interaction of physical and human systems that have shaped contemporary Sub-Saharan Africa (GPS) (SSWG_F2007-34)
- describe the interaction of physical and human systems that have shaped contemporary South Asia, Southeastern Asia, and Eastern Asia (GPS) (SSWG_F2007-35)
- describe the interaction of physical and human systems that have shaped contemporary Europe (GPS) (SSWG_F2007-36)
- describe the interaction of physical and human systems that have shaped contemporary Latin America (GPS) (SSWG_F2007-37)
- describe the interaction of physical and human systems that have shaped contemporary Canada and the United States (GPS) (SSWG_F2007-38)
- describe the interaction of physical and human systems that have shaped contemporary Oceania, including Australia, New Zealand, and Antarctica (GPS) (SSWG_F2007-39)

WORLD HISTORY

A - Map and Globe Skills

- use cardinal directions (GPS) (SSWH_A2007-1)
- use intermediate directions (GPS) (SSWH_A2007-2)
- use a letter/number grid system to determine location (GPS) (SSWH_A2007-3)
- compare and contrast the categories of natural, cultural, and political features found on maps (GPS) (SSWH_A2007-4)
- use customary and metric map scales to determine distance on a map (GPS) (SSWH_A2007-5)
- use map key/legend to acquire information from historical, physical, political, resource, product, and economic maps (GPS) (SSWH_A2007-6)
- use a map to explain the impact of geography on historical and current events (GPS) (SSWH_A2007-7)
- draw conclusions and make generalizations based on information from maps (GPS) (SSWH_A2007-8)
- use latitude and longitude to determine location (GPS) (SSWH_A2007-9)
- use graphic scales to determine distances on a map (GPS) (SSWH_A2007-10)
- compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSWH_A2007-11)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSWH_A2007-12)

B - Information Processing Skills

- compare similarities and differences (GPS) (SSWH_B2007-13)
- organize items chronologically (GPS) (SSWH_B2007-14)
- identify issues and/or problems and alternative solutions (GPS) (SSWH_B2007-15)
- distinguish between fact and opinion (GPS) (SSWH_B2007-16)
- identify main idea, detail, sequence of events, and cause and effect in a social studies context (GPS) (SSWH_B2007-17)
- identify and use primary and secondary sources (GPS) (SSWH_B2007-18)
- interpret timelines (GPS) (SSWH_B2007-19)
- identify social studies reference resources to use for a specific purpose (GPS) (SSWH_B2007-20)
- construct charts and tables (GPS) (SSWH_B2007-21)
- analyze artifacts (GPS) (SSWH_B2007-22)
- draw conclusions and make generalizations (GPS) (SSWH_B2007-23)
- analyze graphs and diagrams (GPS) (SSWH_B2007-24)
- translate dates into centuries, eras, or ages (GPS) (SSWH_B2007-25)
B - Information Processing Skills (continued)
- formulate appropriate research questions (GPS) (SSWH_B2007-26)
- determine adequacy and/or relevancy of information (GPS) (SSWH_B2007-27)
- check for consistency of information (GPS) (SSWH_B2007-28)
- interpret political cartoons (GPS) (SSWH_B2007-29)

C - Ancient Civilizations
- analyze the origins, structures, and interactions of complex societies in the ancient Eastern Mediterranean from 8000 BCE to 500 BCE (GPS) (SSWH_C2007-30)
- identify the major achievements of Chinese and Indian societies from 1100 BCE to 500 CE (GPS) (SSWH_C2007-31)
- examine the political, philosophical, and cultural interaction of Classical Mediterranean societies from 700 BCE to 400 CE (GPS) (SSWH_C2007-32)

D - Byzantine Empire, Asian Dynasties, and African Kingdoms
- analyze the importance of the Byzantine and Mongol empires between 450 CE and 1500 CE (GPS) (SSWH_D2007-33)
- trace the origins and expansion of the Islamic World between 600 CE and 1300 CE (GPS) (SSWH_D2007-34)
- describe the diverse characteristics of early African societies before 1800 (GPS) (SSWH_D2007-35)
- demonstrate an understanding of the development of societies in Central and South America (GPS) (SSWH_D2007-36)

E - Middle Ages, Renaissance, and Reformation
- analyze European medieval society with regard to culture, politics, society, and economics (GPS) (SSWH_E2007-37)
- analyze the change and continuity in the Renaissance and Reformation (GPS) (SSWH_E2007-38)

F - Discovery and Expansion
- analyze the impact of the age of discovery and expansion into the Americas, Africa, and Asia (GPS) (SSWH_F2007-39)
- investigate political and social changes in Japan and in China from the seventeenth century CE to mid nineteenth century CE (GPS) (SSWH_F2007-40)
- examine the origins and contributions of the Ottoman, Safavid, and Mughal empires (GPS) (SSWH_F2007-41)

G - Elizabethan England, Revolutions, and Rebellions
- examine the intellectual, political, social, and economic factors which changed the world view of Europeans (GPS) (SSWH_G2007-42)
- analyze the Age of Revolutions and Rebellions (GPS) (SSWH_G2007-43)

H - Nationalism, Imperialism, and World War I
- describe the impact of industrialization, the rise of nationalism, and the major characteristics of world-wide imperialism (GPS) (SSWH_H2007-44)
- explain long term causes of World War I and its global impact (GPS) (SSWH_H2007-45)

I - World War II
- identify the major political and economic factors that shaped world societies between World War I and World War II (GPS) (SSWH_I2007-46)
- identify the global political, economic, and social impact of World War II (GPS) (SSWH_I2007-47)

J - The 20th Century World
- analyze the global social, economic, and political impact of the Cold War and decolonization from 1945 to 1989 (GPS) (SSWH_J2007-48)
- examine change and continuity in the world since the 1960s (GPS) (SSWH_J2007-49)
- analyze globalization in the contemporary world (GPS) (SSWH_J2007-50)
U.S. HISTORY

A - Map and Globe Skills
• use cardinal directions (GPS) (SSUH_A2007-1)
• use intermediate directions (GPS) (SSUH_A2007-2)
• use a letter/number grid system to determine location (GPS) (SSUH_A2007-3)
• compare and contrast the categories of natural, cultural, and political features found on maps (GPS) (SSUH_A2007-4)
• use customary and metric map scales to determine distance on a map (GPS) (SSUH_A2007-5)
• use map key/legend to acquire information from historical, physical, political, resource, product, and economic maps (GPS) (SSUH_A2007-6)
• use a map to explain the impact of geography on historical and current events (GPS) (SSUH_A2007-7)
• draw conclusions and make generalizations based on information from maps (GPS) (SSUH_A2007-8)
• use latitude and longitude to determine location (GPS) (SSUH_A2007-9)
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• compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSUH_A2007-11)
• compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSUH_A2007-12)

B - Information Processing Skills
• compare similarities and differences (GPS) (SSUH_B2007-13)
• organize items chronologically (GPS) (SSUH_B2007-14)
• identify issues and/or problems and alternative solutions (GPS) (SSUH_B2007-15)
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• draw conclusions and make generalizations (GPS) (SSUH_B2007-23)
• analyze graphs and diagrams (GPS) (SSUH_B2007-24)
• translate dates into centuries, eras, or ages (GPS) (SSUH_B2007-25)
• formulate appropriate research questions (GPS) (SSUH_B2007-26)
• determine adequacy and/or relevancy of information (GPS) (SSUH_B2007-27)
• check for consistency of information (GPS) (SSUH_B2007-28)
• interpret political cartoons (GPS) (SSUH_B2007-29)

C - Settlement and Colonization
• examine 17th century life in the early Spanish, French, Dutch, and English colonies, and why these colonies were founded (GPS) (SSUH_C2007-30)
• trace the ways that the economy and society of British North America developed (GPS) (SSUH_C2007-31)

D - Revolution and the Formation of a New Nation
• explain the primary causes of the American Revolution (GPS) (SSUH_D2007-32)
• identify the ideological, military, and diplomatic aspects of the American Revolution (GPS) (SSUH_D2007-33)
• analyze the development of American Constitutional government, explaining its relationship to the Enlightenment, and describe how the early national leaders implemented the new government (GPS) (SSUH_D2007-34)
D - Revolution and the Formation of a New Nation *(continued)*
• analyze the impact of territorial expansion and population growth and its impact in the early decades of the new nation (GPS) (SSUH_D2007-35)
• explain the process of economic growth in the first half of the 19th century, its regional and national impact, and the different responses to it (GPS) (SSUH_D2007-36)

E - Growth, Change, Crisis, Compromise, and Conflict
• explain the relationship between westward expansion and the rise of sectionalism (GPS) (SSUH_E2007-37)
• identify the key events, issues, and individuals relating to the causes, course and consequences of the Civil War (GPS) (SSUH_E2007-38)
• identify legal, political and social dimensions of Reconstruction (GPS) (SSUH_E2007-39)

F - Urbanization, Immigration, Industrialization, and Imperialism
• describe the growth of big business and technological innovations after Reconstruction (GPS) (SSUH_F2007-40)
• analyze important consequences of American industrial growth (GPS) (SSUH_F2007-41)
• identify major efforts to reform American society and politics in the Progressive Era (GPS) (SSUH_F2007-42)
• explain America’s evolving relationship with the world at the turn of the 20th century (GPS) (SSUH_F2007-43)

G - World War I
• analyze the origins and impact of U.S. involvement in World War I (GPS) (SSUH_G2007-44)
• identify key developments in the aftermath of World War I (GPS) (SSUH_G2007-45)
• analyze the causes and consequences of the Great Depression (GPS) (SSUH_G2007-46)
• describe Franklin Roosevelt’s New Deal as a response to the Depression and compare the ways governmental programs aided those in need (GPS) (SSUH_G2007-47)

H - World War II
• identify the origins, major developments, and the domestic impact of World War II, especially the growth of the federal government (GPS) (SSUH_H2007-48)
• analyze the domestic and international impact of the Cold War on the United States (GPS) (SSUH_H2007-49)

I - 20th Century to Present
• explain economic growth and its impact on the United States from 1945 - 1970 (GPS) (SSUH_I2007-50)
• identify dimensions of the Civil Rights movement from 1945 - 1970 (GPS) (SSUH_I2007-51)
• describe and assess the impact of political developments from 1945 - 1970 (GPS) (SSUH_I2007-52)
• analyze the impact of social change movements and organizations of the 1960’s (GPS) (SSUH_I2007-53)
• describe changes in national politics since 1968 (GPS) (SSUH_I2007-54)

ECONOMICS

A - Map and Globe Skills
• compare and contrast the categories of natural, cultural, and political features found on maps as it relates to trade (GPS) (SSEC_A2007-1)
• use map key/legend to acquire information from physical, political, resource, product, and economic maps (GPS) (SSEC_A2007-2)
• draw conclusions and make generalizations based on information from maps (GPS) (SSEC_A2007-3)
• compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSEC_A2007-4)
B - Information Processing Skills
- compare similarities and differences (GPS) (SSEC_B2007-5)
- identify issues and/or problems and alternative solutions (GPS) (SSEC_B2007-6)
- distinguish between fact and opinion (GPS) (SSEC_B2007-7)
- identify and use primary and secondary sources (GPS) (SSEC_B2007-8)
- identify social studies reference resources to use for a specific purpose (GPS) (SSEC_B2007-9)
- construct charts and tables (GPS) (SSEC_B2007-10)
- draw conclusions and make generalizations (GPS) (SSEC_B2007-11)
- analyze graphs and diagrams (GPS) (SSEC_B2007-12)
- formulate appropriate research questions (GPS) (SSEC_B2007-13)
- determine adequacy and/or relevancy of information (GPS) (SSEC_B2007-14)
- check for consistency of information (GPS) (SSEC_B2007-15)
- interpret political cartoons (GPS) (SSEC_B2007-16)

C - Fundamental Concepts
- explain why limited productive resources and unlimited wants result in scarcity, opportunity costs, and trade-offs for individuals, businesses and governments (GPS) (SSEC_C2007-17)
- explain how specialization and voluntary exchange between buyers and sellers increase the satisfaction of both parties (GPS) (SSEC_C2007-18)
- compare and contrast different economic systems, and explain how they answer the three basic economic questions of what to produce, how to produce, and for whom to produce (GPS) (SSEC_C2007-19)
- describe the roles of government in a market economy (GPS) (SSEC_C2007-20)
- explain how productivity, economic growth, and future standards of living are influenced by investment in factories, machinery, new technology, and the health, education and training of people (GPS) (SSEC_C2007-21)

D - Microeconomic Concepts
- analyze how households and businesses are interdependent and interact through flows of goods, services, and money (GPS) (SSEC_D2007-22)
- explain how the Law of Demand, the Law of Supply, prices, and profits work to determine production, distribution, and economic behavior in a market economy (GPS) (SSEC_D2007-23)
- explain the organization and role of business and analyze the four types of market structures in the U.S. economy (GPS) (SSEC_D2007-24)

E - Macroeconomic Concepts
- illustrate the means by which economic activity is measured (GPS) (SSEC_E2007-25)
- explain the role and functions of the Federal Reserve System (GPS) (SSEC_E2007-26)
- explain how the government uses fiscal policy to promote price stability, full employment, and economic growth (GPS) (SSEC_E2007-27)

F - International Economics
- explain why individuals, businesses, and governments trade goods and services (GPS) (SSEC_F2007-28)
- explain why countries sometimes erect trade barriers and sometimes advocate free trade (GPS) (SSEC_F2007-29)
- explain how changes in exchange rates can impact the purchasing power of individuals in the United States and other countries (GPS) (SSEC_F2007-30)

G - Personal Finance
- apply rational decision to the making of personal spending and savings choices (GPS) (SSEC_G2007-31)
- explain that banks and other financial institutions are businesses which channel funds from savers to investors (GPS) (SSEC_G2007-32)
G - Personal Finance (continued)

- explain how changes in monetary and fiscal policy can impact an individual’s spending and savings choices (GPS) (SSEC_G2007-33)
- evaluate the costs and benefits of using credit (GPS) (SSEC_G2007-34)
- describe how insurance and other risk-management strategies protect against financial loss (GPS) (SSEC_G2007-35)
- describe how the earnings of workers are determined in the marketplace (GPS) (SSEC_G2007-36)

POLITICAL SYSTEMS

A - Map and Globe Skills

- compare and contrast the categories of natural, cultural, and political features found on maps (GPS) (SSPS_A2007-1)
- use map key/legend to acquire information from historical, physical, political, resource, product, and economic maps (GPS) (SSPS_A2007-2)
- draw conclusions and make generalizations based on information from maps (GPS) (SSPS_A2007-3)
- compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSPS_A2007-4)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSPS_A2007-5)

B - Information Processing Skills

- compare similarities and differences (GPS) (SSPS_B2007-6)
- organize items chronologically (GPS) (SSPS_B2007-7)
- identify issues and/or problems and alternative solutions (GPS) (SSPS_B2007-8)
- distinguish between fact and opinion (GPS) (SSPS_B2007-9)
- identify main idea, detail, sequence of events, and cause and effect in a social studies context (GPS) (SSPS_B2007-10)
- identify and use primary and secondary sources (GPS) (SSPS_B2007-11)
- interpret timelines (GPS) (SSPS_B2007-12)
- identify social studies reference resources to use for a specific purpose (GPS) (SSPS_B2007-13)
- construct charts and tables (GPS) (SSPS_B2007-14)
- analyze artifacts (GPS) (SSPS_B2007-15)
- draw conclusions and make generalizations (GPS) (SSPS_B2007-16)
- analyze graphs and diagrams (GPS) (SSPS_B2007-17)
- translate dates into centuries, eras, or ages (GPS) (SSPS_B2007-18)
- formulate appropriate research questions (GPS) (SSPS_B2007-19)
- determine adequacy and/or relevancy of information (GPS) (SSPS_B2007-20)
- check for consistency of information (GPS) (SSPS_B2007-21)
- interpret political cartoons (GPS) (SSPS_B2007-22)

C - Foundations and Principles of American Government

- analyze and make connections among the general purposes, historical theories, and the types and systems of government (GPS) (SSPS_C2007-23)
- describe significant connections between key events in English and colonial history and the growth of American representative democracy culminating in the Declaration of Independence, the Articles of Confederation, and the Constitutional Convention (GPS) (SSPS_C2007-24)
- demonstrate knowledge of the fundamental principles of the Constitution, the structure of the document, and the federal system of government it established (GPS) (SSPS_C2007-25)
**D - Political Participation**
- investigate how the development of American political parties, special interest groups and the media affect public opinion and political involvement in local, state, and national elections (GPS) (SSPS_D2007-26)

**E - Three Branches of Government**
- explain the organization, function, and powers of the legislative branch (GPS) (SSPS_E2007-27)
- explain the organization, function, and powers of the executive branch (GPS) (SSPS_E2007-28)
- explain the organization, function, and powers of the judicial branch (GPS) (SSPS_E2007-29)

**F - Civil Rights, Civil Liberties, and Citizenship**
- analyze civil liberties and equal protection in the United States (GPS) (SSPS_F2007-30)
- relate the means of becoming an American citizen and the need to learn and understand the rights and responsibilities of citizenship as given by the local, state, and national government, thus being able to participate fully as a citizen of the United States (GPS) (SSPS_F2007-31)

**CONTEMPORARY ISSUES**

**A - Map and Globe Skills**
- compare and contrast the categories of natural, cultural, and political features found on maps as it relates to trade (GPS) (SSCI_A2007-1)
- use map key/legend to acquire information from physical, political, resource, product, and economic maps (GPS) (SSCI_A2007-2)
- draw conclusions and make generalizations based on information from maps (GPS) (SSCI_A2007-3)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSCI_A2007-4)

**B - Information Processing Skills**
- compare similarities and differences (GPS) (SSCI_B2007-5)
- identify issues and/or problems and alternative solutions (GPS) (SSCI_B2007-6)
- distinguish between fact and opinion (GPS) (SSCI_B2007-7)
- distinguish between fact and opinion (GPS) (SSCI_B2007-7)
- identify and use primary and secondary sources (GPS) (SSCI_B2007-8)
- identify social studies reference resources to use for a specific purpose (GPS) (SSCI_B2007-9)
- construct charts and tables (GPS) (SSCI_B2007-10)
- draw conclusions and make generalizations (GPS) (SSCI_B2007-11)
- analyze graphs and diagrams (GPS) (SSCI_B2007-12)
- formulate appropriate research questions (GPS) (SSCI_B2007-13)
- determine adequacy and/or relevancy of information (GPS) (SSCI_B2007-14)
- check for consistency of information (GPS) (SSCI_B2007-15)
- interpret political cartoons (GPS) (SSCI_B2007-16)

**C - Academic Knowledge**
- analyze current trends leading toward international economic cooperation (GPS) (SSCI_C2007-17)
- analyze the struggle between environmental protection and economic progress (GPS) (SSCI_C2007-18)
- describe the challenges relating to urbanization and changes in family and household structure (GPS) (SSCI_C2007-19)
- analyze the major issues regarding international human rights (GPS) (SSCI_C2007-20)
- recognize the growing diversity of American society (GPS) (SSCI_C2007-21)
- analyze the causes for the growth of radical groups throughout the world and the effects of such growth (GPS) (SSCI_C2007-22)
C - Academic Knowledge (continued)

- analyze the costs, benefits, and opportunities presented by technology as a means to address political, social, and economic problems (GPS) (SSCI_C2007-23)
- examine the health and social problems which place a great demand on community agencies and resources (GPS) (SSCI_C2007-24)

CONTROVERSIAL ISSUES

A - Map and Globe Skills

- compare and contrast the categories of natural, cultural, and political features found on maps (GPS) (SSCN_A2007-1)
- use map key/legend to acquire information from historical, physical, political, resource, product, and economic maps (GPS) (SSCN_A2007-2)
- draw conclusions and make generalizations based on information from maps (GPS) (SSCN_A2007-3)
- compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSCN_A2007-4)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSCN_A2007-5)

B - Information Processing Skills

- compare similarities and differences (GPS) (SSCN_B2007-6)
- organize items chronologically (GPS) (SSCN_B2007-7)
- identify issues and/or problems and alternative solutions (GPS) (SSCN_B2007-8)
- distinguish between fact and opinion (GPS) (SSCN_B2007-9)
- identify main idea, detail, sequence of events, and cause and effect in a social studies context (GPS) (SSCN_B2007-10)
- identify and use primary and secondary sources (GPS) (SSCN_B2007-11)
- interpret timelines (GPS) (SSCN_B2007-12)
- identify social studies reference resources to use for a specific purpose (GPS) (SSCN_B2007-13)
- construct charts and tables (GPS) (SSCN_B2007-14)
- analyze artifacts (GPS) (SSCN_B2007-15)
- draw conclusions and make generalizations (GPS) (SSCN_B2007-16)
- analyze graphs and diagrams (GPS) (SSCN_B2007-17)
- translate dates into centuries, eras, or ages (GPS) (SSCN_B2007-18)
- formulate appropriate research questions (GPS) (SSCN_B2007-19)
- determine adequacy and/or relevancy of information (GPS) (SSCN_B2007-20)
- check for consistency of information (GPS) (SSCN_B2007-21)
- interpret political cartoons (GPS) (SSCN_B2007-22)

C - World Views, Logical Fallacies, and Constructive Discourse

- examine the three most common world views, which may influence an individual’s perspective on controversial issues (GPS) (SSCN_C2007-23)
- analyze the most common fallacies of ordinary reasoning in order to evaluate the validity, clarity, and precision of arguments (GPS) (SSCN_C2007-24)
- examine the basic principles of constructive discourse in order to engage in rational, thoughtful discussions on public policy issues (GPS) (SSCN_C2007-25)
D - Life and Health Issues
• analyze and evaluate major life/health issues facing today’s society (GPS) (SSCN_D2007-26)
• evaluate the increasing economic demand on community agencies and resources (GPS) (SSCN_D2007-27)
• formulate possible solutions based on an informed perspective rather than an emotional reaction to the issues (GPS) (SSCN_D2007-28)

E - Discrimination Issues
• analyze current discrimination issues in the United States (GPS) (SSCN_E2007-29)
• examine and evaluate the government’s attempt to deal with invidious discrimination (SSCN_E2007-30)
• evaluate whether invidious discrimination harms all Americans or just those who are its target (GPS) (SSCN_E2007-31)

F - Constitutional Issues
• examine arguments for and against several volatile constitutional issues in the United States (GPS) (SSCN_F2007-32)
• explain why rights guaranteed in the Constitution are relative and are not absolute (GPS) (SSCN_F2007-33)

G - Global Issues
• examine and evaluate several significant global issues confronting the modern world (GPS) (SSCN_G2007-34)
• analyze policy options proposed for each global issue (GPS) (SSCN_G2007-35)
• identify which option would appear to be an optimally effective choice in each case (GPS) (SSCN_G2007-36)

ETHICS AND THE LAW

A - Information Processing Skills
• compare similarities and differences (GPS) (SSEL_A2007-1)
• organize items chronologically (GPS) (SSEL_A2007-2)
• identify issues and/or problems and alternative solutions (GPS) (SSEL_A2007-3)
• distinguish between fact and opinion (GPS) (SSEL_A2007-4)
• identify main idea, detail, sequence of events, and cause and effect in a social studies context (GPS) (SSEL_A2007-5)
• identify and use primary and secondary sources (GPS) (SSEL_A2007-6)
• interpret timelines (GPS) (SSEL_A2007-7)
• identify social studies reference resources to use for a specific purpose (GPS) (SSEL_A2007-8)
• construct charts and tables (GPS) (SSEL_A2007-9)
• analyze artifacts (GPS) (SSEL_A2007-10)
• draw conclusions and make generalizations (GPS) (SSEL_A2007-11)
• analyze graphs and diagrams (GPS) (SSEL_A2007-12)
• translate dates into centuries, eras, or ages (GPS) (SSEL_A2007-13)
• formulate appropriate research questions (GPS) (SSEL_A2007-14)
• determine adequacy and/or relevancy of information (GPS) (SSEL_A2007-15)
• check for consistency of information (GPS) (SSEL_A2007-16)
• interpret political cartoons (GPS) (SSEL_A2007-17)

B - Academic Knowledge
• analyze cases which explore relationships between law and morals/ethics (GPS) (SSEL_B2007-18)
• state the elements of business-related crimes (GPS) (SSEL_B2007-19)
• identify laws affecting family legal rights and obligations (GPS) (SSEL_B2007-20)
• identify and interpret primary and secondary sources (GPS) (SSEL_B2007-21)
• examine and analyze the individual rights and responsibilities guaranteed by the Constitution of the United States (GPS) (SSEL_B2007-22)
B - Academic Knowledge (continued)
- examine the concept of criminal law and determine how moral and other values influence the definition of what is criminal (GPS) (SSEL_B2007-23)
- describe the process of becoming a United States citizen and identify rights and responsibilities of citizenship (GPS) (SSEL_B2007-24)
- examine the ways that laws affect our daily lives, and draw inferences from these effects about the meaning of the law (GPS) (SSEL_B2007-25)
- demonstrate knowledge of ethical and legal issues related to the use of computers (GPS) (SSEL_B2007-26)
- demonstrate ethical decision-making skills when presented with case studies and simulations of situations in a variety of environments, including web-based situations (GPS) (SSEL_B2007-27)

LAW

A - Information Processing Skills
- compare similarities and differences (GPS) (SSLW_A2007-1)
- organize items chronologically (GPS) (SSLW_A2007-2)
- identify issues and/or problems and alternative solutions (GPS) (SSLW_A2007-3)
- distinguish between fact and opinion (GPS) (SSLW_A2007-4)
- identify main idea, detail, sequence of events and cause and effect in a social studies context (GPS) (SSLW_A2007-5)
- identify and use primary and secondary sources (GPS) (SSLW_A2007-6)
- interpret timelines (GPS) (SSLW_A2007-7)
- identify social studies reference resources to use for a specific purpose (GPS) (SSLW_A2007-8)
- construct charts and tables (GPS) (SSLW_A2007-9)
- analyze artifacts (GPS) (SSLW_A2007-10)
- draw conclusions and make generalizations (GPS) (SSLW_A2007-11)
- analyze graphs and diagrams (GPS) (SSLW_A2007-12)
- translate dates into centuries, eras, or ages (GPS) (SSLW_A2007-13)
- formulate appropriate research questions (GPS) (SSLW_A2007-14)
- determine adequacy and/or relevancy of information (GPS) (SSLW_A2007-15)
- check for consistency of information (GPS) (SSLW_A2007-16)
- interpret political cartoons (GPS) (SSLW_A2007-17)

B - Legal History
- analyze the early legal systems and the effect they had on our current government and rights (GPS) (SSLW_B2007-18)

C - Judicial System
- explain court systems in the United States (GPS) (SSLW_C2007-19)

D - Civil Law
- explain civil laws and processes (GPS) (SSLW_D2007-20)

E - Criminal Law
- describe criminal laws and processes (GPS) (SSLW_E2007-21)
PHILOSOPHY

A - Information Processing Skills

- compare similarities and differences (GPS) (SSPH_A2007-1)
- organize items chronologically (GPS) (SSPH_A2007-2)
- identify issues and/or problems and alternative solutions (GPS) (SSPH_A2007-3)
- distinguish between fact and opinion (GPS) (SSPH_A2007-4)
- identify main idea, detail, sequence of events and cause and effect in a social studies context (GPS) (SSPH_A2007-5)
- identify and use primary and secondary sources (GPS) (SSPH_A2007-6)
- interpret timelines (GPS) (SSPH_A2007-7)
- identify social studies reference resources to use for a specific purpose (GPS) (SSPH_A2007-8)
- construct charts and tables (GPS) (SSPH_A2007-9)
- analyze artifacts (GPS) (SSPH_A2007-10)
- draw conclusions and make generalizations (GPS) (SSPH_A2007-11)
- analyze graphs and diagrams (GPS) (SSPH_A2007-12)
- translate dates into centuries, eras, or ages (GPS) (SSPH_A2007-13)
- formulate appropriate research questions (GPS) (SSPH_A2007-14)
- determine adequacy and/or relevancy of information (GPS) (SSPH_A2007-15)
- check for consistency of information (GPS) (SSPH_A2007-16)
- interpret political cartoons (GPS) (SSPH_A2007-17)

B - Academic Knowledge

- describe a basic framework for the study of philosophical thought ... why ask why? (GPS) (SSPH_B2007-18)
- differentiate mythological explanations vs. teachings of the Pre-Socratic “Natural Philosophers” (GPS) (SSPH_B2007-19)
- analyze philosophical advancements during the Golden Age of Athens: Discourse in the Agora (GPS) (SSPH_B2007-20)
- discuss early Christianity’s relation to Semitic culture and its influence on Indo-European thought (GPS) (SSPH_B2007-21)
- analyze major aspects of Eastern philosophy originating in China, India, and the Middle East (GPS) (SSPH_B2007-22)
- analyze differing strands of Western Medieval philosophical thought (GPS) (SSPH_B2007-23)
- profile the Renaissance Era philosopher-scientists (GPS) (SSPH_B2007-24)
- differentiate the opposing views of modern empiricists and modern rationalist thinkers (GPS) (SSPH_B2007-25)
- analyze the philosophical contributions of important German thinkers (GPS) (SSPH_B2007-26)
- compare and contrast the following schools of modern thought and philosophy (GPS) (SSPH_B2007-27)
- analyze the beliefs and contributions of leading post-modern and feminist philosophers (GPS) (SSPH_B2007-28)

PSYCHOLOGY

A - Map and Globe Skills

- compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSPY_A2007-1)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSPY_A2007-2)

B - Information Processing Skills

- compare similarities and differences (GPS) (SSPY_B2007-3)
- organize items chronologically (GPS) (SSPY_B2007-4)
- identify issues and/or problems and alternative solutions (GPS) (SSPY_B2007-5)
- distinguish between fact and opinion (GPS) (SSPY_B2007-6)
B - Information Processing Skills (continued)
• identify main idea, detail, sequence of events, and cause and effect in a social studies context (GPS) (SSPY_B2007-7)
• identify and use primary and secondary sources (GPS) (SSPY_B2007-8)
• interpret timelines (GPS) (SSPY_B2007-9)
• identify social studies reference resources to use for a specific purpose (GPS) (SSPY_B2007-10)
• construct charts and tables (GPS) (SSPY_B2007-11)
• analyze artifacts (GPS) (SSPY_B2007-12)
• draw conclusions and make generalizations (GPS) (SSPY_B2007-13)
• analyze graphs and diagrams (GPS) (SSPY_B2007-14)
• translate dates into centuries, eras, or ages (GPS) (SSPY_B2007-15)
• formulate appropriate research questions (GPS) (SSPY_B2007-16)
• determine adequacy and/or relevancy of information (GPS) (SSPY_B2007-17)
• check for consistency of information (GPS) (SSPY_B2007-18)
• interpret political cartoons (GPS) (SSPY_B2007-19)

C - Psychology as a Science
• describe and explain the scope of psychology and its major subfields (GPS) (SSPY_C2007-20)
• distinguish among the types of research strategies used by psychologists to explore behavior and mental processes (GPS) (SSPY_C2007-21)

D - Human Behavior
• investigate the major biological systems and their influence on human behavior (GPS) (SSPY_D2007-22)
• explain the sensory processes and how people perceive their environment (GPS) (SSPY_D2007-23)

E - Learning
• diagram the processes of learning including classical and operant conditioning and cognitive learning (GPS) (SSPY_E2007-24)

F - Motivation and Emotion
• analyze the factors that produce motivation and emotion (GPS) (SSPY_F2007-25)

G - Memory and Cognition
• identify processes of memory formation and the factors that influence it (GPS) (SSPY_G2007-26)
• describe the basic elements compromising thought (GPS) (SSPY_G2007-27)
• identify the various states of consciousness (GPS) (SSPY_G2007-28)
• describe the methods psychologists use to measure individual differences and evaluate their effectiveness (GPS) (SSPY_G2007-29)
• identify and explain major sources of stress and strategies to promote health (GPS) (SSPY_G2007-30)

H - Lifespan and Development
• trace the physical, social, and cognitive changes from the prenatal period through the lifespan (GPS) (SSPY_H2007-31)
• distinguish among the characteristics of the psychodynamic, cognitive-behavioral, and humanistic approaches to personality development (GPS) (SSPY_H2007-32)

I - Abnormal Behavior
• distinguish among the major categories of abnormal behavior and describe appropriate therapies (GPS) (SSPY_I2007-33)
SOCIOLOGY

A - Map and Globe Skills
- compare and contrast the categories of natural, cultural, and political features found on maps (GPS) (SSSO_A2007-1)
- use map key/legend to acquire information from historical, physical, political, resource, product, and economic maps (GPS) (SSSO_A2007-2)
- draw conclusions and make generalizations based on information from maps (GPS) (SSSO_A2007-3)
- compare maps of the same place at different points in time and from different perspectives to determine changes, identify trends, and generalize about human activities (GPS) (SSSO_A2007-4)
- compare maps with data sets (charts, tables, graphs) and/or readings to draw conclusions and make generalizations (GPS) (SSSO_A2007-5)

B - Information Processing Skills
- compare similarities and differences (GPS) (SSSO_B2007-6)
- organize items chronologically (GPS) (SSSO_B2007-7)
- identify issues and/or problems and alternative solutions (GPS) (SSSO_B2007-8)
- distinguish between fact and opinion (GPS) (SSSO_B2007-9)
- identify main idea, detail, sequence of events and cause and effect in a social studies context (GPS) (SSSO_B2007-10)
- identify and use primary and secondary sources (GPS) (SSSO_B2007-11)
- interpret timelines (GPS) (SSSO_B2007-12)
- identify social studies reference resources to use for a specific purpose (GPS) (SSSO_B2007-13)
- construct charts and tables (GPS) (SSSO_B2007-14)
- analyze artifacts (GPS) (SSSO_B2007-15)
- draw conclusions and make generalizations (GPS) (SSSO_B2007-16)
- analyze graphs and diagrams (GPS) (SSSO_B2007-17)
- translate dates into centuries, eras, or ages (GPS) (SSSO_B2007-18)
- formulate appropriate research questions (GPS) (SSSO_B2007-19)
- determine adequacy and/or relevancy of information (GPS) (SSSO_B2007-20)
- check for consistency of information (GPS) (SSSO_B2007-21)
- interpret political cartoons (GPS) (SSSO_B2007-22)

C - Sociology as a Science
- define sociology and trace its development as a science, illustrating the important similarities and differences it shares with other fields of scientific study (GPS) (SSSO_C2007-23)

D - Culture and Socialization
- describe the progression of cultural change and the elements of language, norms, sanctions, and values (GPS) (SSSO_D2007-24)
- describe the effects of socialization, social structures, social institutions, and social role on the way individuals interact with one another in a given social situation (GPS) (SSSO_D2007-25)

E - Social Issues
- define social control and determine how conformity to the norms of society can be controlled by the creation of laws (GPS) (SSSO_E2007-26)
- examine the structure and process of social inequality relative to the concepts of stratification and social mobility (GPS) (SSSO_E2007-27)
- determine the impact of race and ethnicity on social issues (GPS) (SSSO_E2007-28)
- identify the social consequences of continued age segregation, discrimination, and stereotyping of the elderly (GPS) (SSSO_E2007-29)
F - Social Institutions
• analyze the functions, organization, and dimensions of the key social institutions: family, religion, political system, education system, health care, and economic system (GPS) (SSSO_F2007-30)

G - Trends
• examine current sociological trends and their impact on individual societies and the interdependence of societies (GPS) (SSSO_G2007-31)
ADVANCED WEB DESIGN

A - Overview of Web Design
- analyze web design concepts, the current state of the web, and technologies used on the web (GPS) (BCWD_A2009-1)
- examine ethical and legal issues related to web development (GPS) (BCWD_A2009-2)

B - Planning, Designing, Implementation, and Evaluation
- apply the concepts of project management, phases, the use of teams, and portfolios in web development (GPS) (BCWD_B2009-3)
- evaluate and develop a website’s aesthetic qualities (GPS) (BCWD_B2009-4)
- examine and apply website testing, publishing, and maintenance concepts (GPS) (BCWD_B2009-5)

C - Digital Media on the Web
- apply the effective use of multimedia (GPS) (BCWD_C2009-6)

D - Advanced Layout Features
- apply advanced web page layout features and concepts (GPS) (BCWD_D2009-7)

E - Advanced Features of Mark-Up and Scripting Languages
- identify, compare, and contrast, and use various scripting and mark-up languages used on the internet (GPS) (BCWD_E2009-8)

F - Site Development with HTML Editors and Scalable Vector Graphic Programs
- apply advanced website development with HTML editors and scalable vector graphics programs (GPS) (BCWD_F2009-9)

G - Web Servers and Databases
- analyze the use of databases in site development (GPS) (BCWD_G2009-10)

H - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCWD_H2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCWD_H2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCWD_H2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCWD_H2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCWD_H2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCWD_H2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCWD_H2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCWD_H2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCWD_H2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCWD_H2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCWD_H2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCWD_H2012-12)
H - Literacy Standards (continued)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCWD_H2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCWD_H2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCWD_H2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCWD_H2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCWD_H2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCWD_H2012-18)
• 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 (CCGPS) (BCWD_H2012-19)

BANKING AND INVESTING

A - Banking Basics
• apply basic banking concepts, terminology, and operating procedures (GPS) (BCBI_A2009-1)
• compare and contrast various types of negotiable instruments (GPS) (BCBI_A2009-2)
• analyze credit creation and its impact on financial institutions (GPS) (BCBI_A2009-3)
• interpret and measure financial performance of banking institutions (GPS) (BCBI_A2009-4)
• describe the effects of E-commerce on banking (GPS) (BCBI_A2009-5)

B - Investing
• evaluate basic investment principles (GPS) (BCBI_B2009-6)
• identify the importance of investment planning and establishing financial goals (GPS) (BCBI_B2009-7)
• analyze various investment instruments (GPS) (BCBI_B2009-8)
• identify and describe employee retirement benefit package concepts (GPS) (BCBI_B2009-9)
• analyze future investment trends (GPS) (BCBI_B2009-10)

C - International Finance
• explain the concepts, role, and importance of international finance (GPS) (BCBI_C2009-11)

D - Careers in Banking and Investing
• identify banking and investing career opportunities (GPS) (BCBI_D2009-12)
• describe the customer service skills needed in banking (GPS) (BCBI_D2009-13)
• describe skills needed for bank operations and management (GPS) (BCBI_D2009-14)
• perform financial planning responsibilities (GPS) (BCBI_D2009-15)

E - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCBI_E2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCBI_E2012-2)
E - Literacy Standards (continued)

- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCBI_E2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCBI_E2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCBI_E2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCBI_E2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCBI_E2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCBI_E2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCBI_E2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCBI_E2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCBI_E2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCBI_E2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCBI_E2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCBI_E2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCBI_E2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCBI_E2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCBI_E2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCBI_E2012-18)
- 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 (CCGPS) (BCBI_E2012-19)

BEGINNING PROGRAMMING

A - Careers

- explore careers in computing (GPS) (BCBP_A2009-1)

B - Hardware and Software Components

- describe the major parts of a processor and how the processor handles execution of a machine language program (GPS) (BCBP_B2009-2)
- explain the process that turns a high-level language program into something a computer can execute (GPS) (BCBP_B2009-3)
- explore different representations of images and music in a computer (GPS) (BCBP_B2009-4)
- design algorithms and programming solutions for a variety of computational problems (GPS) (BCBP_B2009-5)
C - Programming
• design solutions for simple programs using basic programming techniques and constructs (GPS) (BCBP_C2009-6)
• utilize and develop algorithms to solve simple problems (GPS) (BCBP_C2009-7)
• analyze the relationships between classes (GPS) (BCBP_C2009-8)

D - Data Structures
• write programs that process one-dimensional arrays (GPS) (BCBP_D2009-9)
• write programs that process two-dimensional arrays (GPS) (BCBP_D2009-10)
• write programs that process lists (GPS) (BCBP_D2009-11)
• apply the basics of stacks and queues (GPS) (BCBP_D2009-12)

E - Limits of Computing
• analyze limits on computing as a result of programming complexity (GPS) (BCBP_E2009-13)
• identify time-related limits to computing (GPS) (BCBP_E2009-14)

F - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCBP_F2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCBP_F2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCBP_F2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCBP_F2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCBP_F2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCBP_F2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCBP_F2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCBP_F2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCBP_F2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCBP_F2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCBP_F2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCBP_F2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCBP_F2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCBP_F2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCBP_F2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCBP_F2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCBP_F2012-17)
F - Literacy Standards (continued)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCBP_F2012-18)
• 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 (CCGPS) (BCBP_F2012-19)

BUSINESS COMMUNICATION AND PRESENTATION

A - Foundations of Communication
• practice written communication by planning and writing documents that are appropriate for the situation, purpose, and audience (GPS) (BCBC_A2009-1)
• practice oral communication by communicating in a clear, courteous, concise, and appropriate manner (GPS) (BCBC_A2009-2)
• listen discriminately and respond appropriately to oral communication (GPS) (BCBC_A2009-3)

B - Societal Communication
• locate, assess, and use information from a variety of print and online sources (GPS) (BCBC_B2009-4)
• read and analyze for content, interpretation, and inference (GPS) (BCBC_B2009-5)

C - Workplace Communication
• communicate using a variety of oral, written, and listening techniques in business and personal environments (GPS) (BCBC_C2009-6)
• demonstrate a variety of written and oral skills in the pursuit of employment in the communication and multimedia fields (GPS) (BCBC_C2009-7)

D - Technological Communication
• describe and utilize hardware, software, and the preparation needed to create a multimedia presentation for business or personal use (GPS) (BCBC_D2009-9)
• utilize multimedia software to effectively produce a variety of personal and business media-rich projects (GPS) (BCBC_D2009-10)

E - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCBC_E2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCBC_E2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCBC_E2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCBC_E2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCBC_E2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCBC_E2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCBC_E2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCBC_E2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCBC_E2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCBC_E2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCBC_E2012-11)
E - Literacy Standards (continued)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCBC_E2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCBC_E2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCBC_E2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCBC_E2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCBC_E2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCBC_E2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCBC_E2012-18)
• 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 (CCGPS) (BCBC_E2012-19)

BUSINESS ESSENTIALS

A - Communications
• explain and demonstrate appropriate oral and written communication on personal and professional levels (GPS) (BCBE_A2009-1)
• produce written communications that utilize proper tone, grammar, and bias-free language (GPS) (BCBE_A2009-2)
• utilize appropriate oral communications that express wants, needs, and feelings (GPS) (BCBE_A2009-3)

B - Leadership and Teamwork
• describe the importance of leadership within a business endeavor (GPS) (BCBE_B2009-4)
• engage in teamwork in an effort to accomplish a common goal leading to a successful business endeavor (GPS) (BCBE_B2009-5)

C - Business Concepts
• analyze basic business concepts and how they are applied to business activities (GPS) (BCBE_C2009-6)
• utilize technology in a variety of ways while solving business problems (GPS) (BCBE_C2009-7)
• analyze the impact of international business on the economy (GPS) (BCBE_C2009-8)
• explain the importance of developing and organizing a successful business plan (GPS) (BCBE_C2009-9)

D - Entrepreneurial Discovery
• explain the unique characteristics, traits, and concepts of the successful entrepreneur (GPS) (BCBE_D2009-10)

E - Ethics
• compare and contrast common ethical issues (GPS) (BCBE_E2009-11)
• evaluate personal responsibility of ethical behavior (GPS) (BCBE_E2009-12)
• investigate the relationship between ethics and law (GPS) (BCBE_E2009-13)
• analyze the importance of employer/employee relationships (GPS) (BCBE_E2009-14)
• evaluate the impact of technology on business ethics (GPS) (BCBE_E2009-15)

F - Forms of Business Ownership
• evaluate sole proprietorships as a form of business (GPS) (BCBE_F2009-16)
• evaluate the different types of partnerships as a form of business (GPS) (BCBE_F2009-17)
F - Forms of Business Ownership (continued)
• evaluate the different types of corporations as a form of business (GPS) (BCBE_F2009-18)
• analyze the most appropriate form of business ownership for any planned business (GPS) (BCBE_F2009-19)
• evaluate franchising as a form of business ownership (GPS) (BCBE_F2009-20)

G - Functions of Management
• analyze the management functions and their implementation and integration within the business environment (GPS) (BCBE_G2009-21)
• analyze and explain the importance of planning for personal and professional gains (GPS) (BCBE_G2009-22)
• analyze and explain the organizing function and how it is used to group resources within a business structure (GPS) (BCBE_G2009-23)
• analyze and explain the directing function and how it relates to leadership in an organization (GPS) (BCBE_G2009-24)
• analyze and describe the control function of management and how it is used to measure performance (GPS) (BCBE_G2009-25)
• develop a budget (GPS) (BCBE_G2009-26)
• analyze the financial statements of a business and utilize those statements to make important business decisions (GPS) (BCBE_G2009-27)
• complete financial records which are fundamental for any business (GPS) (BCBE_G2009-28)

H - Business Law
• identify the sources of law and procedures of the court system as they relate to entrepreneurship (GPS) (BCBE_H2009-29)
• examine the role of contracts, sales law, and consumer law as they relate to entrepreneurship (GPS) (BCBE_H2009-30)
• analyze the role of agency law and employment law as they relate to entrepreneurship (GPS) (BCBE_H2009-31)
• analyze and assess government regulations and the effects on entrepreneurial ventures (GPS) (BCBE_H2009-32)

I - Risk Management
• explain the various risks involved in operating a business (GPS) (BCBE_I2009-33)
• evaluate choices available to consumers for protection against risk and financial loss (GPS) (BCBE_I2009-34)

J - Marketing
• analyze the concept of marketing and its importance to business ownership (GPS) (BCBE_J2009-35)
• identify and analyze the relationship between marketing and the individual, business, and society (GPS) (BCBE_J2009-36)

K - Job Acquisition Process
• integrate all forms of communication in the pursuit of employment (GPS) (BCBE_K2009-37)

L - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCBE_L2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCBE_L2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCBE_L2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCBE_L2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCBE_L2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCBE_L2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCBE_L2012-7)
L - Literacy Standards (continued)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCBE_L2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCBE_L2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCBE_L2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCBE_L2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCBE_L2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCBE_L2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCBE_L2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCBE_L2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCBE_L2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCBE_L2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCBE_L2012-18)
- 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 (CCGPS) (BCBE_L2012-19)

BUSINESS PROCEDURES

A - Leadership and Management
- develop personal leadership and management skills to function effectively and efficiently in a business environment (GPS) (BCPR_A2009-1)

B - Office Operations
- organize and plan activities for a business setting (GPS) (BCPR_B2009-2)

C - Finance and Accounting
- demonstrate financial and accounting skills needed to function effectively and efficiently in a business environment (GPS) (BCPR_C2009-3)

D - Communication
- demonstrate effective reading, writing, speaking, and listening skills while performing business assignments and responsibilities (GPS) (BCPR_D2009-4)

E - Social, Ethical, and Human Issues
- examine the role of ethics and social responsibility in business decision-making (GPS) (BCPR_E2009-5)
- explain human resource functions and their importance to an organization’s successful operation (GPS) (BCPR_E2009-6)
F - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCPR_F2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCPR_F2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCPR_F2012-3)
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- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCPR_F2012-5)
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- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCPR_F2012-9)
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- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCPR_F2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCPR_F2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCPR_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCPR_F2012-18)
- 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 (CCGPS) (BCPR_F2012-19)

COMPUTER APPLICATIONS I

A - Social, Ethical, and Human Issues

- apply the social, legal, and ethical issues related to technology used in personal and professional endeavors (GPS) (BCA1_A2009-1)

B - Productivity

- utilize technology as a tool to increase productivity in completing a variety of input technologies to create, edit, and publish industry-appropriate documents (GPS) (BCA1_B2009-2)
B – Productivity (continued)

• utilize word processing and/or desktop publishing software through a variety of input technologies to create, edit, and publish industry-appropriate documents (GPS) (BCA1_B2009-3)
• utilize spreadsheet software to create, edit, and publish industry-appropriate files (GPS) (BCA1_B2009-4)
• utilize database software to create, edit, and publish industry-appropriate files (GPS) (BCA1_B2009-5)
• utilize presentation software to create, edit, and publish industry-appropriate files (GPS) (BCA1_B2009-6)

C - Communications

• describe how telecommunications can be used to collaborate, publish, and interact with peers, teachers, experts, and other audiences (GPS) (BCA1_C2009-7)
• utilize a variety of forms of communication in the successful pursuit of employment (GPS) (BCA1_C2009-8)

D - Information Research

• utilize technology to access, review, evaluate, and select information from multiple resources for reporting purposes (GPS) (BCA1_D2009-9)

E - Problem Solving

• develop strategies for solving problems (GPS) (BCA1_E2009-10)

F - Literacy Standards

• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCA1_F2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCA1_F2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCA1_F2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCA1_F2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCA1_F2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCA1_F2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCA1_F2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCA1_F2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCA1_F2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCA1_F2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCA1_F2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCA1_F2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCA1_F2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or try a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCA1_F2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCA1_F2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCA1_F2012-16)
F - Literacy Standards (continued)

- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCA1_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCA1_F2012-18)
- 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 (CCGPS) (BCA1_F2012-19)

COMPUTER APPLICATIONS II

A - Productivity

- utilize technology as a tool to increase productivity in completing a variety of input technologies to create, edit, and publish industry-appropriate documents (GPS) (BCA2_A2009-1)
- utilize word processing and/or desktop publishing software through a variety of input technologies to create, edit, and publish industry-appropriate documents (GPS) (BCA2_A2009-2)
- utilize spreadsheet software to create, edit, and publish industry-appropriate files (GPS) (BCA2_A2009-3)
- utilize database software to create, edit, and publish industry-appropriate files (GPS) (BCA2_A2009-4)
- utilize presentation software to create, edit, and publish industry-appropriate files (GPS) (BCA2_A2009-5)

B - Communications

- utilize appropriate methods to collaborate, publish, and interact with peers, teachers, experts, and other audiences (GPS) (BCA2_B2009-6)

C - Information Research

- utilize technology to access, review, evaluate, and select information from multiple resources for reporting purposes (GPS) (BCA2_C2009-7)

D - Problem Solving

- develop strategies for solving problems (GPS) (BCA2_D2009-8)

E - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCA2_E2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCA2_E2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCA2_E2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCA2_E2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCA2_E2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCA2_E2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCA2_E2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCA2_E2012-8)
E - Literacy Standards (continued)

- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCA2_E2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCA2_E2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCA2_E2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCA2_E2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCA2_E2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCA2_E2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCA2_E2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCA2_E2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCA2_E2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCA2_E2012-18)
- 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 (CCGPS) (BCA2_E2012-19)

COMPUTING IN THE MODERN WORLD

A - Careers, Ethics, and History of Computing

- explore the different careers available in the field of computing (GPS) (BCCM_A2009-1)
- identify key developments and individuals relating to the history of computing and explore emerging technologies (GPS) (BCCM_A2009-2)
- evaluate the professional and ethical issues involved in the use of computer technology (GPS) (BCCM_A2009-3)

B - Hardware and Software Components

- identify and describe the major hardware and software components of a computer and their interactions (GPS) (BCCM_B2009-4)
- compare and contrast computer features (GPS) (BCCM_B2009-5)
- analyze how numbers and characters are represented in a computer (GPS) (BCCM_B2009-6)
- describe how pictures, sounds, and video are represented in a computer (GPS) (BCCM_B2009-7)

C - Networking Basics

- identify and describe basic components of computer networks (GPS) (BCCM_C2009-8)
- demonstrate and troubleshoot connecting a computer to a network (GPS) (BCCM_C2009-9)
- analyze and apply key issues in data transmission (GPS) (BCCM_C2009-10)
- analyze networking trends and issues (GPS) (BCCM_C2009-11)

D - Web Design / Internet Essentials Standards

- search for information and evaluate search results (GPS) (BCCM_D2009-12)
- examine internet security issues and recognize the importance of working in a secure environment (GPS) (BCCM_D2009-13)
- evaluate, compare, and contrast websites (GPS) (BCCM_D2009-14)
- design and create a basic website (GPS) (BCCM_D2009-15)
E - Problem Solving
- analyze examples that identify the broad interdisciplinary utility of computers and algorithmic problem-solving in the modern world (GPS) (BCCM_E2009-16)
- apply strategies to solve various problems (GPS) (BCCM_E2009-17)
- apply algorithmic thinking to solve problems (GPS) (BCCM_E2009-18)
- describe the basic steps in algorithmic problem-solving (GPS) (BCCM_E2009-19)

F - Programming
- demonstrate basic programming concepts (GPS) (BCCM_F2009-20)

G - Limits of Computing
- analyze and apply the limitations of algorithms (GPS) (BCCM_G2009-21)
- identify limits on computing imposed by the laws of physics (GPS) (BCCM_G2009-22)

H - Data Structures
- demonstrate the ability to use an ordered data structure (GPS) (BCCM_H2009-23)

I - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCCM_I2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCCM_I2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCCM_I2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCCM_I2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCCM_I2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCCM_I2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCCM_I2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCCM_I2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCCM_I2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCCM_I2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCCM_I2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCCM_I2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCCM_I2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCCM_I2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCCM_I2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCCM_I2012-16)
I - Literacy Standards (continued)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCCM_I2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCCM_I2012-18)
• 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 (CCGPS) (BCCM_I2012-19)

ENTREPRENEURIAL VENTURES

A - Communications
• acquire meaning from written material and apply the information to a task (GPS) (BCEV_A2009-1)
• evaluate the importance of communicating effectively with coworkers (GPS) (BCEV_A2009-2)
• evaluate the importance of effective communication with people of different cultures and/or countries (GPS) (BCEV_A2009-3)
• utilize strategies for effective conflict management (GPS) (BCEV_A2009-4)

B - Economics
• apply the fundamentals of international trade (GPS) (BCEV_B2009-5)

C - Functions of Management
• apply the planning function of management (GPS) (BCEV_C2009-6)
• describe organization as a function of management (GPS) (BCEV_C2009-7)
• apply the role of directing or lending as a function of management (GPS) (BCEV_C2009-8)
• apply the role of directing or leading as a function of management (GPS) (BCEV_C2009-9)
• apply controlling and evaluation together as a function of management (GPS) (BCEV_C2009-10)

D - Organizational Structures
• evaluate appropriate organizational structures for various business models (GPS) (BCEV_D2009-11)
• analyze the interrelationships of organizational models (GPS) (BCEV_D2009-12)

E - Financial Management
• create a budget and use the budget to guide management decisions (GPS) (BCEV_E2009-13)
• analyze financial issues that are related to doing business with other countries (GPS) (BCEV_E2009-14)
• identify the elements needed to develop a financial plan and to obtain business financing (GPS) (BCEV_E2009-15)
• evaluate the financial strength of a business (GPS) (BCEV_E2009-16)

F - Information Management
• apply information management concepts and how they support effective business operations (GPS) (BCEV_F2009-17)
• analyze vital records and how they differ from important useful records (GPS) (BCEV_F2009-18)
• understand and use a filing classification system and equipment (GPS) (BCEV_F2009-19)
• evaluate and implement an electronic records management system (GPS) (BCEV_F2009-20)
• explain the purpose of a records center (GPS) (BCEV_F2009-21)

G - Operations Management
• develop organizational skills to improve efficiency (GPS) (BCEV_G2009-22)
• implement expense control strategies to enhance the financial well being of a business (GPS) (BCEV_G2009-23)
• perform activities to facilitate ongoing business operations (GPS) (BCEV_G2009-24)
H - Human Resource Management
• evaluate the role and function of a human resource unit in an organization (GPS) (BCEV_H2009-25)
• evaluate techniques that are used to staff a unit within an organization (GPS) (BCEV_H2009-26)
• integrate training and development strategies to increase productivity and employee satisfaction (GPS) (BCEV_H2009-27)
• analyze the importance of employee evaluations (GPS) (BCEV_H2009-28)
• evaluate the importance of creating a culture that fosters good employee morale, resulting in employee retention (GPS) (BCEV_H2009-29)
• describe and understand separation, termination, and transition strategies (GPS) (BCEV_H2009-30)
• investigate the concept of labor relations (GPS) (BCEV_H2009-31)

I - Marketing Management
• analyze the impact and influence of external factors on marketing (GPS) (BCEV_I2009-32)
• evaluate the role of marketing research in constructing a small business management model (GPS) (BCEV_I2009-33)
• develop a plan to identify, reach, and retain customers in a specific target market (GPS) (BCEV_I2009-34)
• evaluate and apply elements of the marketing mix (GPS) (BCEV_I2009-35)

J - Business Plan Development and Implementation
• conduct a needs assessment for a business (GPS) (BCEV_J2009-36)
• create a plan for the product or service for a business (GPS) (BCEV_J2009-37)
• prepare a marketing strategy (GPS) (BCEV_J2009-38)
• prepare the components of a business plan (GPS) (BCEV_J2009-39)
• develop the financial plan for a business (GPS) (BCEV_J2009-40)
• create a plan for production (GPS) (BCEV_J2009-41)
• create a plan to staff a business (GPS) (BCEV_J2009-42)
• apply the functions of operating a business (GPS) (BCEV_J2009-43)
• evaluate the effectiveness of a business (GPS) (BCEV_J2009-44)

K - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCEV_K2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCEV_K2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCEV_K2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCEV_K2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCEV_K2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCEV_K2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCEV_K2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCEV_K2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCEV_K2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCEV_K2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCEV_K2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCEV_K2012-12)
K - Literacy Standards (continued)

- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCEV_K2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCEV_K2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCEV_K2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCEV_K2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCEV_K2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCEV_K2012-18)
- 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 (CCGPS) (BCEV_K2012-19)

FINANCIAL LITERACY

A - Income

- identify various forms of income and analyze factors that affect income as a part of the career decision-making process (GPS) (BCFL_A2009-1)

B - Money Management

- analyze employee deductions and benefits that affect financial security (GPS) (BCFL_B2009-2)
- analyze taxes in the United States that affect income (GPS) (BCFL_B2009-3)
- develop and evaluate a spending and savings plan (GPS) (BCFL_B2009-4)
- analyze checking accounts and other banking services (GPS) (BCFL_B2009-5)

C - Spending and Credit

- analyze factors that affect the choice of credit, the cost of credit, and the legal aspects of using credit (GPS) (BCFL_C2009-6)
- apply a decision-making model to maximize consumer satisfaction when buying goods and services (GPS) (BCFL_C2009-7)

D - Saving and Investing

- evaluate savings and investment options to meet short- and long-term goals (GPS) (BCFL_D2009-8)

E - Protecting

- analyze choices available to consumers for protection against risk and financial loss (GPS) (BCFL_E2009-9)
- evaluate how to help deter, detect, and defend against identity theft (GPS) (BCFL_E2009-10)

F - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCFL_F2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCFL_F2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCFL_F2012-3)
F - Literacy Standards (continued)

- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCFL_F2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCFL_F2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCFL_F2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCFL_F2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCFL_F2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCFL_F2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCFL_F2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCFL_F2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCFL_F2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCFL_F2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCFL_F2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCFL_F2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCFL_F2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCFL_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCFL_F2012-18)
- 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 (CCGPS) (BCFL_F2012-19)

FUNDAMENTALS OF WEB DESIGN

A - Basic Web Site Construction and Techniques

- apply the process of planning, development, and implementation of web sites (GPS) (BCFW_A2009-1)
- analyze the governmental, ethical, and industry accessibility compliance issues (GPS) (BCFW_A2009-2)

B - Languages

- describe the history of markup languages (GPS) (BCFW_B2009-3)
- apply languages, markup tags, and good coding practices commonly used to create web pages (GPS) (BCFW_B2009-4)

C - Graphical Elements and Layouts

- identify and demonstrate appropriate use of graphical elements for web pages (GPS) (BCFW_C2009-5)
- apply web page layout fundamentals (GPS) (BCFW_C2009-6)

D - GUI Editors

- create web pages using GUI-based HTML editing and graphics software (GPS) (BCFW_D2009-7)
E - Commerce
• analyze e-commerce practices (GPS) (BCFW_E2009-8)

F - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCFW_F2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCFW_F2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCFW_F2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCFW_F2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCFW_F2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCFW_F2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCFW_F2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCFW_F2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCFW_F2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCFW_F2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCFW_F2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCFW_F2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCFW_F2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCFW_F2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCFW_F2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCFW_F2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCFW_F2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCFW_F2012-18)
• 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 (CCGPS) (BCFW_F2012-19)
INFORMATION TECHNOLOGY ESSENTIALS

A - Personal Computer Components
• identify the fundamental principles of using personal computers (GPS) (BCTE_A2009-1)
• install, configure, optimize, and upgrade personal computer components (GPS) (BCTE_A2009-2)
• identify tools, diagnostic procedures, and troubleshooting techniques for personal computer components (GPS) (BCTE_A2009-3)
• perform preventive maintenance on personal computer components (GPS) (BCTE_A2009-4)

B - Laptops and Portable Devices
• identify fundamental principles of using laptops and portable devices (GPS) (BCTE_B2009-5)
• install, configure, optimize, and upgrade laptops and portable devices (GPS) (BCTE_B2009-6)
• identify tools, basic diagnostic procedures, and troubleshooting techniques for laptops and portable devices (GPS) (BCTE_B2009-7)
• perform preventive maintenance on laptops and portable devices (GPS) (BCTE_B2009-8)

C - Operating Systems
• identify the fundamental principles of operating systems (GPS) (BCTE_C2009-9)
• install, configure, optimize, and upgrade operating systems (GPS) (BCTE_C2009-10)
• identify tools, diagnostic procedures, and troubleshooting techniques for operating systems (GPS) (BCTE_C2009-11)
• perform preventive maintenance for operating systems (GPS) (BCTE_C2009-12)

D - Printers and Scanners
• identify the fundamental principles of using printers and scanners (GPS) (BCTE_D2009-13)
• identify basic concepts of installing, configuring, optimizing, and upgrading printers and scanners (GPS) (BCTE_D2009-14)
• identify tools and diagnostic procedures to troubleshoot printers and scanners (GPS) (BCTE_D2009-15)

E - Networks
• identify the fundamental principles of networks (GPS) (BCTE_E2009-16)
• install, configure, optimize, and upgrade networks (GPS) (BCTE_E2009-17)
• identify tools, diagnostic procedures, and troubleshooting techniques for networks (GPS) (BCTE_E2009-18)

F - Security
• identify the fundamentals and principles of security (GPS) (BCTE_F2009-19)
• install configure, upgrade, and optimize security (GPS) (BCTE_F2009-20)
• identify tools, diagnostic procedures, and troubleshooting techniques for security (GPS) (BCTE_F2009-21)
• perform preventive maintenance for computer security (GPS) (BCTE_F2009-22)

G - Safety and Environmental
• describe the aspects and importance of safety and environmental issues (GPS) (BCTE_G2009-23)
• identify potential hazards and implement proper safety procedures, including BCS-ITE-1ESD precautions and procedures, safe work environment, and equipment handling (GPS) (BCTE_G2009-24)

H - Communication and Professionalism
• apply appropriate communication skills including listening and tact/discretion when communicating with customers and colleagues (GPS) (BCTE_H2009-25)
• use job-related professional behavior including notation of privacy, confidentiality, and respect for the customer and customers' property (GPS) (BCTE_H2009-26)

I - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCTE_I2012-1)
I - Literacy Standards (continued)

- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCTE_I2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCTE_I2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCTE_I2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCTE_I2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCTE_I2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCTE_I2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCTE_I2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCTE_I2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCTE_I2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCTE_I2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCTE_I2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCTE_I2012-13)
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- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCTE_I2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCTE_I2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCTE_I2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCTE_I2012-18)
- 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 (CCGPS) (BCTE_I2012-19)

INFORMATION TECHNOLOGY SUPPORT

A - Personal Computer Components
- install, configure, optimize, and upgrade personal computer components (GPS) (BCTS_A2009-1)
- identify tools, diagnostic procedures, and troubleshooting techniques for personal computer components (GPS) (BCTS_A2009-2)
- perform preventive maintenance on personal computer components (GPS) (BCTS_A2009-3)

B - Laptops and Portable Devices
- identify fundamental principles of using laptops and portable devices (GPS) (BCTS_B2009-4)
- install, configure, optimize, and upgrade laptops and portable devices (GPS) (BCTS_B2009-5)
- utilize tools, diagnostic procedures, and troubleshooting techniques for laptops and portable devices (GPS) (BCTS_B2009-6)
C - Operating Systems
- identify the fundamental principles of operating systems (GPS) (BCTS_C2009-7)
- install, configure, optimize, and upgrade operating systems (GPS) (BCTS_C2009-8)
- identify tools, diagnostic procedures, and troubleshooting techniques for operating systems (GPS) (BCTS_C2009-9)
- perform preventive maintenance for operating systems (GPS) (BCTS_C2009-10)

D - Printers and Scanners
- identify the fundamental principles of using printers and scanners (GPS) (BCTS_D2009-11)
- install, configure, optimize, and upgrade printers and scanners (GPS) (BCTS_D2009-12)
- identify tools and diagnostic procedures to troubleshoot printers and scanners (GPS) (BCTS_D2009-13)
- perform preventive maintenance of printers and scanners (GPS) (BCTS_D2009-14)

E - Networks
- identify the fundamental principles of networks (GPS) (BCTS_E2009-15)
- install, configure, optimize, and upgrade networks (GPS) (BCTS_E2009-16)
- utilize tools, diagnostic procedures, and troubleshooting techniques for networks (GPS) (BCTS_E2009-17)

F - Security
- identify the fundamentals and principles of security (GPS) (BCTS_F2009-18)
- install, configure, upgrade, and optimize security (GPS) (BCTS_F2009-19)
- identify tools, diagnostic procedures, and troubleshooting techniques for security (GPS) (BCTS_F2009-20)
- perform preventive maintenance for computer security (GPS) (BCTS_F2009-21)

G - Safety and Environmental
- identify potential hazards and implement proper safety precautions and procedures, safe work environment, and equipment handling (GPS) (BCTS_G2009-22)

H - Communication and Professionalism
- utilize appropriate communication skills, including listening and tact/discretion, when communicating with customers and colleagues (GPS) (BCTS_H2009-23)
- use job-related professional behavior including notation of privacy, confidentiality, and respect for the customer and customers’ property (GPS) (BCTS_H2009-24)

I - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCTS_I2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCTS_I2012-2)
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- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCTS_I2012-4)
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- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCTS_I2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCTS_I2012-8)
I - Literacy Standards (continued)

- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCTS_I2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCTS_I2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCTS_I2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCTS_I2012-12)
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- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCTS_I2012-17)
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- 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 (CCGPS) (BCTS_I2012-19)

INSURANCE AND RISK MANAGEMENT

A - Risk Management
- explain the principles of risk management and insurance (GPS) (BCRM_A2009-1)

B - Business Insurance
- identify risks present in business and the insurance needed to protect business (GPS) (BCRM_B2009-2)

C - Product Liability
- describe product liability in the business environment and ways to manage this risk (GPS) (BCRM_C2009-3)

D - Automobile Insurance
- describe the principles of automobile insurance and identify types of coverage and policy types available (GPS) (BCRM_D2009-4)

E - Homeowner’s/Renter’s Insurance
- describe the principles of homeowner’s insurance and identify types of coverage and policy types available (GPS) (BCRM_E2009-5)

F - Health/Medical Insurance
- describe the principles of health insurance and identify types of coverage and policy types available (GPS) (BCRM_F2009-6)

G - Life Insurance
- describe the principles of life insurance and identify types of coverage and policy types available (GPS) (BCRM_G2009-7)

H - Disability Insurance
- describe the principles of disability insurance and identify types of coverage and policy types available (GPS) (BCRM_H2009-8)
I - Long-Term Care Insurance
• describe the principles of long-term care insurance and identify types of coverage and policy types available (GPS) (BCRM_I2009-9)

J - Workplace Risk
• explain the purpose of worker’s compensation insurance, its responsibility, and its benefits (GPS) (BCRM_J2009-10)
• explain the purpose of unemployment insurance, its responsibility, and its benefits (GPS) (BCRM_J2009-11)

K - Other Types of Insurance
• identify other types of insurance in the industry and the risks the types protect (GPS) (BCRM_K2009-12)

L - Insurance Ethics and Insurance Fraud
• describe the ethical responsibilities of the insurance company, the agent, and the insured (GPS) (BCRM_L2009-13)
• list different types of insurance fraud and explain how fraud affects policyholders (GPS) (BCRM_L2009-14)

M - Careers in Insurance
• identify three segments of insurance company operations and evaluate advantages to a career in the insurance industry (GPS) (BCRM_M2009-15)

N - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCRM_N2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCRM_N2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCRM_N2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCRM_N2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCRM_N2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCRM_N2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCRM_N2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCRM_N2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCRM_N2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCRM_N2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCRM_N2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCRM_N2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCRM_N2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCRM_N2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCRM_N2012-15)
N - Literacy Standards (continued)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCRM_N2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCRM_N2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCRM_N2012-18)
• 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 (CCGPS) (BCRM_N2012-19)

INTRODUCTION TO ANIMATION AND 3-D DESIGN

A - Career Development
• investigate career opportunities, trends, and requirements related to 3-D graphics and animation careers (GPS) (BC3D_A2009-1)

B - Storyboard Fundamentals
• apply design skills needed to formally document project goals in order to focus development efforts (GPS) (BC3D_B2009-2)

C - 3-D Animation Skills
• utilize animation software UI and general features (GPS) (BC3D_C2009-3)
• apply skills for construction of 2-D and 3-D modeling (GPS) (BC3D_C2009-4)
• analyze and apply methods used to modify 3-D models (GPS) (BC3D_C2009-5)

D - Applying Materials and Maps
• specify color materials properly (GPS) (BC3D_D2009-6)
• create various surface materials (GPS) (BC3D_D2009-7)
• manipulate images by adding material maps (GPS) (BC3D_D2009-8)

E - Lighting Techniques
• analyze the effective use of lights on 2-D and 3-D objects (GPS) (BC3D_E2009-9)

F - Camera Techniques
• set and modify camera views (GPS) (BC3D_F2009-10)

G - Animation Rendering
• manipulate frame rate, speed, and direction (GPS) (BC3D_G2009-11)
• manipulate an object’s trajectory (GPS) (BC3D_G2009-12)
• create rendering effects (GPS) (BC3D_G2009-13)

H - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BC3D_H2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BC3D_H2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BC3D_H2012-3)
H - Literacy Standards (continued)

- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BC3D_H2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BC3D_H2012-5)
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- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BC3D_H2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BC3D_H2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BC3D_H2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BC3D_H2012-18)
- 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 (CCGPS) (BC3D_H2012-19)

LEGAL ENVIRONMENT OF BUSINESS

A - Ethics

- summarize the ethical responsibilities of business owners (GPS) (BCLE_A2009-1)
- analyze the effects of diverse cultures and customs on business (GPS) (BCLE_A2009-2)
- explore ethical issues directly related to government regulations (GPS) (BCLE_A2009-3)

B - Business Law

- identify rights and responsibilities of contract negotiations (GPS) (BCLE_B2009-4)
- analyze and explain the importance of sales regulations (GPS) (BCLE_B2009-5)
- identify consumer protection legislation and its effects on business (GPS) (BCLE_B2009-6)
- analyze the role and importance of agency law and employment law as they relate to the conduct of business in national and international marketplaces (GPS) (BCLE_B2009-7)
- explain the legal rules that apply to personal property and real property (GPS) (BCLE_B2009-8)
B - Business Law (continued)
- analyze the function of commercial paper (GPS) (BCLE_B2009-9)
- explain the function of bankruptcy law (GPS) (BCLE_B2009-10)
- evaluate how advances in computer technology impact business law (GPS) (BCLE_B2009-11)
- explain laws and regulations that apply to the environment and energy (GPS) (BCLE_B2009-12)
- analyze the role of government in managing a business (GPS) (BCLE_B2009-13)

C - Risk Management
- explain the purpose of business insurance (GPS) (BCLE_C2009-14)
- evaluate the risk involved in product liability (GPS) (BCLE_C2009-15)
- evaluate automobile insurance (GPS) (BCLE_C2009-16)
- explain and understand business property insurance (GPS) (BCLE_C2009-17)
- evaluate and explain health/medical and life insurance (GPS) (BCLE_C2009-18)
- analyze unemployment insurance (GPS) (BCLE_C2009-19)
- explain and understand disability insurance (GPS) (BCLE_C2009-20)
- explain insurance ethics and insurance fraud (GPS) (BCLE_C2009-21)

D - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCLE_D2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCLE_D2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCLE_D2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCLE_D2012-4)
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- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCLE_D2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCLE_D2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCLE_D2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCLE_D2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCLE_D2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCLE_D2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCLE_D2012-16)
D - Literacy Standards (continued)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCLE_D2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCLE_D2012-18)
- 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 (CCGPS) (BCLE_D2012-19)

NETWORKING SYSTEMS

A - Introduction to Networking
- explore local-area network (LAN), metropolitan area network (MAN), and wide-area network (WAN) trends and issues including the basics of telecommunications and use in the interconnection of networks (GPS) (BCNS_A2009-1)

B - Network Media - Copper Core, Fiber-Optic, Wireless
- describe LAN physical media and network connectivity basics (GPS) (BCNS_B2009-2)
- describe the basics of Ethernet and Token Ring technology (GPS) (BCNS_B2009-3)
- describe the basics of token bus, Fiber Distributed Data Interface (FDDI), and Wireless LAN technology (GPS) (BCNS_B2009-4)

C - Network Operating Systems
- describe the general characteristics of network operating systems and common network computing platforms (GPS) (BCNS_C2009-5)
- install basic system architectures using current windows operating system software to perform network administration (GPS) (BCNS_C2009-6)

D - TCP/IP Essentials
- explore the standard computer network communication protocol TCP/IP and its importance to standards based networks (GPS) (BCNS_D2009-7)

E - Sub-Netting Fundamentals
- explore the concept of sub-netting and its importance to standards based networks (GPS) (BCNS_E2009-8)

F - Network Security
- explore the concepts related to computer network and host-based security (GPS) (BCNS_F2009-9)

G - OSI Model
- differentiate processes, services, and protocols (GPS) (BCNS_G2009-10)

H - Designing, Installing, Maintaining, and Troubleshooting Computer Networks
- describe design standards, analysis, and section for networks (GPS) (BCNS_H2009-11)
- demonstrate installation procedures (GPS) (BCNS_H2009-12)
- describe processes for computer network operation and management procedures including network maintenance and diagnostic testing (GPS) (BCNS_H2009-13)
- describe steps in troubleshooting network problems (GPS) (BCNS_H2009-14)

I - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCNS_I2012-1)
I - Literacy Standards (continued)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCNS_I2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCNS_I2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCNS_I2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCNS_I2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCNS_I2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCNS_I2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCNS_I2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCNS_I2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCNS_I2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BCNS_I2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCNS_I2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCNS_I2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCNS_I2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCNS_I2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCNS_I2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCNS_I2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCNS_I2012-18)
• 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 (CCGPS) (BCNS_I2012-19)

PRINCIPLES OF ACCOUNTING I

A - The Accounting Profession
• evaluate the role accountants play in business and society (GPS) (BCP1_A2009-1)
• investigate and describe career opportunities in the accounting profession (GPS) (BCP1_A2009-2)
• apply the skills and competencies required to be successful in the accounting profession and in an accounting-related career (GPS) (BCP1_A2009-3)

B - Accounting Cycle
• apply the various steps of the accounting cycle for proprietorships and corporations and explain the purpose of each step (GPS) (BCP1_B2009-4)
C - Accounting Process
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of assets (GPS) (BCP1_C2009-5)
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of liabilities (GPS) (BCP1_C2009-6)
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of owners' equity (GPS) (BCP1_C2009-7)
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of revenue, expenses, gains, and losses (GPS) (BCP1_C2009-8)

D - Financial Statements
- interpret and analyze financial statements (GPS) (BCP1_D2009-9)

E - Special Topics
- apply Generally Accepted Accounting Principles (GAAP) to various forms of ownership and payroll (GPS) (BCP1_E2009-10)

F - Interpretation and Use of Data
- utilize appropriate data to evaluate the performance of an organization (GPS) (BCP1_F2009-11)

G - Global Perspective
- research and discuss international accounting societies and theories in accounting and finance (GPS) (BCP1_G2009-12)

H - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCP1_H2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCP1_H2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCP1_H2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCP1_H2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCP1_H2012-5)
- analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCP1_H2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCP1_H2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCP1_H2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCP1_H2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCP1_H2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCP1_H2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCP1_H2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCP1_H2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCP1_H2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCP1_H2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCP1_H2012-16)
H - Literacy Standards (continued)

- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCP1_H2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCP1_H2012-18)
- 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 (CCGPS) (BCP1_H2012-19)

PRINCIPLES OF ACCOUNTING II

A - Accounting Cycle

- apply the various steps of the accounting cycle for corporations and partnerships and explain the purpose of each step (GPS) (BCP2_A2009-1)

B - Accounting Process

- apply Generally Accepted Accounting Principles (GAAP) to determine the value of assets (GPS) (BCP2_B2009-2)
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of liabilities (GPS) (BCP2_B2009-3)
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of owners’ equity (GPS) (BCP2_B2009-4)
- apply Generally Accepted Accounting Principles (GAAP) to determine the value of revenues and expenses (GPS) (BCP2_B2009-5)

C - Financial Statements

- create, interpret, and analyze end of fiscal period activities and financial statements (GPS) (BCP2_C2009-6)

D - Special Topics

- apply appropriate accounting principles to various forms of ownership (GPS) (BCP2_D2009-7)
- apply appropriate accounting principles to income taxation (GPS) (BCP2_D2009-8)
- apply appropriate accounting principles to international accounting (GPS) (BCP2_D2009-9)
- apply appropriate accounting principles to managerial accounting systems (GPS) (BCP2_D2009-10)

E - Interpretation and Use of Data

- utilize management accounting techniques to plan and evaluate the performance of an organization (GPS) (BCP2_E2009-11)

F - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BCP2_F2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BCP2_F2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BCP2_F2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BCP2_F2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BCP2_F2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BCP2_F2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BCP2_F2012-7)
F - Literacy Standards (continued)

- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BCP2_F2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BCP2_F2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BCP2_F2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BCP2_F2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BCP2_F2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BCP2_F2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BCP2_F2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BCP2_F2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BCP2_F2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BCP2_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BCP2_F2012-18)
- 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 (CCGPS) (BCP2_F2012-19)
A - STEM Standards
- recognize the systems, components, and processes of a technological system (GPS) (ET3D_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ET3D_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ET3D_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ET3D_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ET3D_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ET3D_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ET3D_A2009-7)

B - Fasteners
- draw fasteners using American National Standards Institute symbols (GPS) (ET3D_B2009-8)

C - Working Drawings
- create production-ready drawings of parts (GPS) (ET3D_C2009-9)

D - Assembly Drawings
- create assembly drawings (GPS) (ET3D_D2009-10)

E - Rendering
- create a rendered image of a model communicating material and finish (GPS) (ET3D_E2009-11)

F - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ET3D_F2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ET3D_F2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ET3D_F2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ET3D_F2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ET3D_F2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ET3D_F2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ET3D_F2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ET3D_F2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ET3D_F2012-9)
F - Literacy Standards (continued)

- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ET3D_F2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ET3D_F2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ET3D_F2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ET3D_F2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ET3D_F2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ET3D_F2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ET3D_F2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ET3D_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ET3D_F2012-18)
- 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 (CCGPS) (ET3D_F2012-19)

ADVANCED AC AND DC CIRCUITS

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETAC_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETAC_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETAC_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETAC_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETAC_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETAC_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETAC_A2009-7)

B - Academic Knowledge

- identify the history and development of analog circuits (GPS) (ETAC_B2009-8)
- identify and define operational characteristics of power supplies and amplifiers (GPS) (ETAC_B2009-9)
- identify and define oscillator characteristics and applications (GPS) (ETAC_B2009-10)
- identify and define operating characteristics and applications of various communication circuits (GPS) (ETAC_B2009-11)
- identify characteristics and construction of integrated circuits (GPS) (ETAC_B2009-12)
- identify and define characteristics of solid state control devices and circuits (GPS) (ETAC_B2009-13)
C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETAC_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETAC_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETAC_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETAC_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETAC_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETAC_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETAC_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETAC_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETAC_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETAC_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETAC_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETAC_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETAC_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETAC_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETAC_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETAC_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETAC_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETAC_C2012-18)
- 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 (CCGPS) (ETAC_C2012-19)

APPROPRIATE AND ALTERNATIVE ENERGY TECHNOLOGIES

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETAE_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETAE_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETAE_A2009-3)
A - STEM Standards (continued)

- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETAE_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETAE_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETAE_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETAE_A2009-7)

B - Academic Knowledge

- describe the differences between nonrenewable, renewable, and inexhaustible types of energy sources and how that affects their world (GPS) (ETAE_B2009-8)
- define alternative energy and list several alternative sources as well as discuss the regional implications of each, including, but not limited to, economic, environmental, and sustainability issues (GPS) (ETAE_B2009-9)
- define nuclear power and discuss it in terms of its positive and negative impacts as well as its relevancy to various situations in today’s society (GPS) (ETAE_B2009-10)
- analyze the future trends of energy, power, and transportation (GPS) (ETAE_B2009-11)
- develop an alternative energy system that will demonstrate understanding of a unique, as well as appropriate, approach to energy generation (GPS) (ETAE_B2009-12)

C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETAE_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETAE_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETAE_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETAE_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETAE_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETAE_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETAE_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETAE_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETAE_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETAE_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETAE_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETAE_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETAE_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETAE_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETAE_C2012-15)
C - Literacy Standards (continued)

- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETAE_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETAE_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETAE_C2012-18)
- 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 (CCGPS) (ETAE_C2012-19)

ARCHITECTURAL DRAWING AND DESIGN I

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETD1_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETD1_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETD1_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETD1_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETD1_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETD1_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETD1_A2009-7)

B - Technical Skills

- identify components related to the design process (GPS) (ETD1_B2009-8)
- prepare a residential floor plan (GPS) (ETD1_B2009-9)
- analyze and understand roof systems, terminology, style, and construction (GPS) (ETD1_B2009-10)
- prepare elevation drawings for architectural buildings (GPS) (ETD1_B2009-11)
- prepare construction schedules (GPS) (ETD1_B2009-12)
- prepare foundation plans (GPS) (ETD1_B2009-13)

C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETD1_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETD1_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETD1_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETD1_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETD1_C2012-5)
C - Literacy Standards (continued)

- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETD1_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETD1_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETD1_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETD1_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETD1_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETD1_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETD1_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETD1_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETD1_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETD1_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETD1_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETD1_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETD1_C2012-18)
- 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 (CCGPS) (ETD1_C2012-19)

ARCHITECTURAL DRAWING AND DESIGN II

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETD2_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETD2_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETD2_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETD2_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETD2_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETD2_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETD2_A2009-7)
B - Technical Skills
- prepare a set of electrical drawings (GPS) (ETD2_B2009-8)
- prepare sections and details (GPS) (ETD2_B2009-9)
- prepare site plans (GPS) (ETD2_B2009-10)
- create a professional presentation for architectural design (GPS) (ETD2_B2009-11)

C - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETD2_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETD2_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETD2_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETD2_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETD2_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETD2_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETD2_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETD2_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETD2_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETD2_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETD2_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETD2_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETD2_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETD2_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETD2_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETD2_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETD2_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETD2_C2012-18)
- 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 (CCGPS) (ETD2_C2012-19)
DIGITAL ELECTRONICS

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETDE_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETDE_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETDE_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETDE_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETDE_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETDE_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETDE_A2009-7)

B - Academic Knowledge

- apply numbering systems used in digital circuitry (GPS) (ETDE_B2009-8)
- demonstrate the use of names, symbols, truth tables, and Boolean expression for each of the seven basic logic gates (GPS) (ETDE_B2009-9)
- identify commonly used digital codes used in conversion of numbers and letters (GPS) (ETDE_B2009-10)
- use truth tables and interpret waveforms to determine flip-flop mode of operation and output states (GPS) (ETDE_B2009-11)
- identify and describe input and output states of logic gates in various combinations (GPS) (ETDE_B2009-12)
- design and illustrate block diagrams for parallel adder and subtractor circuits (GPS) (ETDE_B2009-13)
- identify the properties and different types of memory devices used in computer systems (GPS) (ETDE_B2009-14)

C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETDE_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETDE_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETDE_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETDE_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETDE_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETDE_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETDE_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETDE_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETDE_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETDE_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETDE_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETDE_C2012-12)
C - Literacy Standards (continued)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETDE_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETDE_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETDE_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETDE_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETDE_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETDE_C2012-18)
- 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 (CCGPS) (ETDE_C2012-19)

ENERGY AND POWER TECHNOLOGY

A - STEM Standards
- recognize the systems, components, and processes of a technological system (GPS) (ETEP_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETEP_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETEP_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETEP_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETEP_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETEP_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETEP_A2009-7)

B - Technical Skills
- describe energy, work, power, and force and analyze the relations of each (GPS) (ETEP_B2009-8)
- identify the six simple machines and explain how each is able to change the value for force and distance in the work relation (GPS) (ETEP_B2009-9)
- differentiate between fluid power systems and apply the laws that govern each (GPS) (ETEP_B2009-10)
- differentiate between AC and DC circuits and apply Ohm’s Law to series, parallel, and series/parallel circuits as well as state Kirchoff’s Law (GPS) (ETEP_B2009-11)
- describe the basic components of a small engine and explain the difference between a 4-stroke and 2-stroke engine (GPS) (ETEP_B2009-12)
C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETEP_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETEP_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETEP_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETEP_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETEP_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETEP_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETEP_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETEP_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETEP_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETEP_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETEP_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETEP_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETEP_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETEP_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETEP_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETEP_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETEP_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETEP_C2012-18)
- 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 (CCGPS) (ETEP_C2012-19)

ENGINEERING APPLICATIONS

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETEA_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETEA_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETEA_A2009-3)
A - STEM Standards (continued)

- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETEA_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETEA_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETEA_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETEA_A2009-7)

B - Technical Skills

- utilize selected discipline specific engineering tools, machines, materials, and processes (GPS) (ETEA_B2009-8)
- develop and follow a detailed plan for the solution of a design problem (GPS) (ETEA_B2009-9)
- demonstrate prototype development (GPS) (ETEA_B2009-10)
- explain the impact of business and marketing on engineering design (GPS) (ETEA_B2009-11)
- identify the impact of social, economic, and environmental issues on the engineering design process (GPS) (ETEA_B2009-12)

C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETEA_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETEA_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETEA_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETEA_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETEA_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETEA_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETEA_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETEA_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETEA_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETEA_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETEA_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETEA_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETEA_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETEA_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETEA_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETEA_C2012-16)
C - Literacy Standards (continued)

- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETEA_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETEA_C2012-18)
- 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 (CCGPS) (ETEA_C2012-19)

ENGINEERING CONCEPTS

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETEC_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETEC_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETEC_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETEC_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETEC_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETEC_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETEC_A2009-7)

B - Technical Skills

- describe the history and characteristics of engineering disciplines (GPS) (ETEC_B2009-8)
- apply the engineering design process (GPS) (ETEC_B2009-9)
- utilize basic engineering tools and resources to solve engineering problems (GPS) (ETEC_B2009-10)
- demonstrate a whole systems approach to engineering and problem-solving (GPS) (ETEC_B2009-11)
- apply engineering graphics and technical writing to communication of an engineering design (GPS) (ETEC_B2009-12)

C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETEC_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETEC_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETEC_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETEC_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETEC_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETEC_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETEC_C2012-7)
C - Literacy Standards (continued)

- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETEC_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETEC_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETEC_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETEC_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETEC_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETEC_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETEC_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETEC_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETEC_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETEC_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETEC_C2012-18)
- 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 (CCGPS) (ETEC_C2012-19)

FOUNDATIONS OF ELECTRONICS

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETFE_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETFE_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETFE_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETFE_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETFE_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETFE_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETFE_A2009-7)

B - Technical Skills

- describe electrical and physical properties of conductors, insulators, and semiconductors (GPS) (ETFE_B2009-8)
- construct circuits with techniques and processes utilized in electronics systems (GPS) (ETFE_B2009-9)
- use various measuring apparatus and processes utilized to gather, analyze, and interpret data (GPS) (ETFE_B2009-10)
- use and interpret component, schematic, and technical data publications for components in electronic systems (GPS) (ETFE_B2009-11)
B - Technical Skills (continued)
• describe the relationships between voltage, current resistance, and power in series, parallel, and combination circuits (GPS) (ETFE_B2009-12)
• construct and evaluate electronic experiments or projects as a culminating experience (GPS) (ETFE_B2009-13)

C - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETFE_C2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETFE_C2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETFE_C2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETFE_C2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETFE_C2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETFE_C2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETFE_C2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETFE_C2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETFE_C2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETFE_C2012-10)
• write arguments focused on discipline-specific content (CCGPS) (ETFE_C2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETFE_C2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETFE_C2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETFE_C2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETFE_C2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETFE_C2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETFE_C2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETFE_C2012-18)
• 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 (CCGPS) (ETFE_C2012-19)
FOUNDATIONS OF ENGINEERING AND TECHNOLOGY

A - STEM Standards
• recognize the systems, components, and processes of a technological system (GPS) (ETET_A2009-1)
• identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETET_A2009-2)
• design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETET_A2009-3)
• apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETET_A2009-4)
• select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETET_A2009-5)
• develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETET_A2009-6)
• develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETET_A2009-7)

B - Technical Skills
• describe the career pathways that are encompassed by Georgia Engineering and Technology education (GPS) (ETET_B2009-8)
• describe the history of technological advancement (GPS) (ETET_B2009-9)
• explain the universal systems mode (GPS) (ETET_B2009-10)
• apply mathematics and science to the solution of a technological problem (GPS) (ETET_B2009-11)
• describe the essential systems and processes involved with invention, innovation, and entrepreneurship (GPS) (ETET_B2009-12)
• utilize visual and verbal communication to express basic design elements (GPS) (ETET_B2009-13)

C - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETET_C2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETET_C2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETET_C2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETET_C2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETET_C2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETET_C2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETET_C2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETET_C2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETET_C2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETET_C2012-10)
• write arguments focused on discipline-specific content (CCGPS) (ETET_C2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETET_C2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETET_C2012-13)
C - Literacy Standards (continued)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETET_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETET_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETET_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETET_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETET_C2012-18)
- 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 (CCGPS) (ETET_C2012-19)

FOUNDATIONS OF MANUFACTURING AND MATERIALS SCIENCE

A - STEM Standards
- recognize the systems, components, and processes of a technological system (GPS) (ETMM_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETMM_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETMM_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETMM_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETMM_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETMM_A2009-6)
- explain the societal impact of manufacturing (GPS) (ETMM_A2009-7)

B - Technical Skills
- describe the history of manufacturing (GPS) (ETMM_B2009-8)
- explain the universal systems model as it relates to manufacturing (GPS) (ETMM_B2009-9)
- apply safe work practices while performing tasks (GPS) (ETMM_B2009-10)
- identify materials and resources used in manufacturing (GPS) (ETMM_B2009-11)
- describe the essential systems and processes involved in manufacturing (GPS) (ETMM_B2009-12)
- complete a pre-planned introductory manufacturing activity which included applying correct safety procedures, appropriate use of materials, and processing operations (GPS) (ETMM_B2009-13)
- utilize visual and verbal communication to present employment and career opportunities in manufacturing (GPS) (ETMM_B2009-14)

C - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETMM_C2012-1)
C - Literacy Standards (continued)

- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETMM_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETMM_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETMM_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETMM_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETMM_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETMM_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETMM_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETMM_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETMM_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETMM_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETMM_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETMM_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETMM_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETMM_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETMM_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETMM_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETMM_C2012-18)
- 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 (CCGPS) (ETMM_C2012-19)

INTRODUCTION TO ENGINEERING, DRAWING, AND DESIGN

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETDD_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETDD_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETDD_A2009-3)
A - STEM Standards (continued)

- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETDD_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETDD_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETDD_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETDD_A2009-7)

B - Career Development

- identify the disciplines related to engineering, drawing, and design professions (GPS) (ETDD_B2009-8)

C - Tools, Equipment and Systems

- utilize tools and equipment safely in the drafting lab (GPS) (ETDD_C2009-9)
- demonstrate the correct operation and maintenance of all drafting tools (GPS) (ETDD_C2009-10)
- demonstrate the proper management of drawing consumables (GPS) (ETDD_C2009-11)
- utilize CAD drafting software (GPS) (ETDD_C2009-12)

D - Pre-Drafting

- create technical freehand sketches (GPS) (ETDD_D2009-13)
- demonstrate proper lettering techniques (GPS) (ETDD_D2009-14)
- demonstrate the use of proper line types (GPS) (ETDD_D2009-15)
- read and draw using the proper scale (GPS) (ETDD_D2009-16)

E - Single View Drawing

- create and dimension single view drawings while applying geometric construction (GPS) (ETDD_E2009-17)

F - Multiview Drawing

- utilize orthographic projection to create and dimension multiview drawings (GPS) (ETDD_F2009-18)

G - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETDD_G2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETDD_G2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETDD_G2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETDD_G2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETDD_G2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETDD_G2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETDD_G2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETDD_G2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETDD_G2012-9)
**G - Literacy Standards (continued)**

- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETDD_G2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETDD_G2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETDD_G2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETDD_G2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETDD_G2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETDD_G2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETDD_G2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETDD_G2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETDD_G2012-18)
- 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 (CCGPS) (ETDD_G2012-19)

**PRODUCTION ENTERPRISES**

**A - STEM Standards**

- recognize the systems, components, and processes of a technological system (GPS) (ETPE_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETPE_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETPE_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETPE_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETPE_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETPE_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETPE_A2009-7)

**B - Academic Knowledge**

- explain the historical and societal impact of production (GPS) (ETPE_B2009-8)
- research careers in manufacturing (GPS) (ETPE_B2009-9)
- explain how and why production enterprises value safe work environments (GPS) (ETPE_B2009-10)

**C - Technical Skills**

- conduct pre-production market research, product design, and product development (GPS) (ETPE_C2009-11)
- design a production system (GPS) (ETPE_C2009-12)
- implement a production system (GPS) (ETPE_C2009-13)
C - Technical Skills (continued)
• develop a reflective document on the completion of the production activity (GPS) (ETPE_C2009-14)

D - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETPE_D2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETPE_D2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETPE_D2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETPE_D2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETPE_D2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETPE_D2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETPE_D2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETPE_D2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETPE_D2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETPE_D2012-10)
• write arguments focused on discipline-specific content (CCGPS) (ETPE_D2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETPE_D2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETPE_D2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETPE_D2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETPE_D2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETPE_D2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETPE_D2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETPE_D2012-18)
• 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 (CCGPS) (ETPE_D2012-19)

RESEARCH, DESIGN, AND PROJECT MANAGEMENT

A - STEM Standards
• recognize the systems, components, and processes of a technological system (GPS) (ETRD_A2009-1)
• identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETRD_A2009-2)
A - STEM Standards (continued)

- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETRD_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETRD_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETRD_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETRD_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETRD_A2009-7)

B - Academic Knowledge

- apply formal research techniques to solve a technical problem (GPS) (ETRD_B2009-8)
- apply research techniques to develop a design solution for/to a technological problem (GPS) (ETRD_B2009-9)
- utilize research techniques to test and evaluate designed prototypes (GPS) (ETRD_B2009-10)
- communicate research findings (GPS) (ETRD_B2009-11)

C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETRD_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETRD_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETRD_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETRD_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETRD_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETRD_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETRD_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETRD_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETRD_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETRD_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (ETRD_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETRD_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETRD_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETRD_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETRD_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETRD_C2012-16)
C - Literacy Standards (continued)

- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETRD_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETRD_C2012-18)
- 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 (CCGPS) (ETRD_C2012-19)

ROBOTICS AND AUTOMATED SYSTEMS

A - STEM Standards

- recognize the systems, components, and processes of a technological system (GPS) (ETAS_A2009-1)
- identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETAS_A2009-2)
- design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETAS_A2009-3)
- apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETAS_A2009-4)
- select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETAS_A2009-5)
- develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETAS_A2009-6)
- develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETAS_A2009-7)

B - Academic Knowledge

- explain the history of automated systems and the benefits of those systems to manufacturing in a global society (GPS) (ETAS_B2009-8)
- identify and explain the major engineering tasks in organizing automated manufacturing (GPS) (ETAS_B2009-9)
- discuss the systems and applications of automation including: AGV, PLC, CNC, CIM, CAD, CAM, and robotics as essential to succeeding globally in a manufacturing market (GPS) (ETAS_B2009-10)

C - Technical Skills

- outline the utilization of programmable control devices and data transfer (GPS) (ETAS_C2009-11)
- apply the principles of PLC, CIM, CAD, CAM, and robotics in the manufacturing of a product (GPS) (ETAS_C2009-12)

D - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETAS_D2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETAS_D2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETAS_D2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETAS_D2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETAS_D2012-5)
D - Literacy Standards (continued)

• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETAS_D2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETAS_D2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETAS_D2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETAS_D2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETAS_D2012-10)
• write arguments focused on discipline-specific content (CCGPS) (ETAS_D2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETAS_D2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETAS_D2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETAS_D2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETAS_D2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETAS_D2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETAS_D2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETAS_D2012-18)
• 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 (CCGPS) (ETAS_D2012-19)

SURVEY OF ENGINEERING GRAPHICS

A - STEM Standards

• recognize the systems, components, and processes of a technological system (GPS) (ETEG_A2009-1)
• identify the impact of engineering and technology within global, economic, environmental, and societal contexts (GPS) (ETEG_A2009-2)
• design technological problem solutions using scientific investigation, analysis and interpretation of data, innovation, invention, and fabrication (GPS) (ETEG_A2009-3)
• apply principles of science, technology, engineering, mathematics, interpersonal communication, and teamwork to the solution of technological problems (GPS) (ETEG_A2009-4)
• select and demonstrate techniques, skills, tools, and understanding related to energy and power, bio-related, communication, transportation, manufacturing, and construction technologies (GPS) (ETEG_A2009-5)
• develop vocabulary and comprehension skills associated with text materials, problems, descriptions, and laboratory activities associated with engineering and technology education (GPS) (ETEG_A2009-6)
• develop leadership and interpersonal problem-solving skills through participation in co-curricular activities associated with the Technology Student Association (GPS) (ETEG_A2009-7)
B - Working Drawing Elements
• identify the elements of working drawings (GPS) (ETEG_B2009-8)

C - Supplementary Drawings
• draw sections using American National Standards Institute standards (GPS) (ETEG_C2009-9)
• draw auxiliary views (GPS) (ETEG_C2009-10)
• draw isometric and oblique drawings (GPS) (ETEG_C2009-11)

D - Intersections and Developments
• create intersections and developments (GPS) (ETEG_D2009-12)

E - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (ETEG_E2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (ETEG_E2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (ETEG_E2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (ETEG_E2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (ETEG_E2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (ETEG_E2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (ETEG_E2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (ETEG_E2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (ETEG_E2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (ETEG_E2012-10)
• write arguments focused on discipline-specific content (CCGPS) (ETEG_E2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (ETEG_E2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (ETEG_E2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (ETEG_E2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (ETEG_E2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (ETEG_E2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (ETEG_E2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (ETEG_E2012-18)
• 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 (CCGPS) (ETEG_E2012-19)
CONSUMER AWARENESS

A - Career Decisions
• determine career opportunities, professional requirements, and current issues for the personal finance industry (GPS) (FCCO_A2010-1)

B - Consumer Economic System
• identify and discuss the consumer’s role in the economic system (GPS) (FCCO_B2010-2)

C - Consumer Goods and Services
• identify effective practices for purchasing consumer goods and services (GPS) (FCCO_C2010-3)

D - Consumer Programs and Services
• analyze various consumer programs and services (GPS) (FCCO_D2010-4)

E - Consumer Protection
• examine essential consumer protection laws and regulations (GPS) (FCCO_E2010-5)

F - Consumer Housing
• identify housing options (GPS) (FCCO_F2010-6)

G - Consumer Finances
• explore tools available for consumers (GPS) (FCCO_G2010-7)

H - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCCO_H2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCCO_H2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCCO_H2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCCO_H2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCCO_H2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCCO_H2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCCO_H2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCCO_H2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCCO_H2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCO_H2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCCO_H2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCO_H2012-12)
H - Literacy Standards (continued)

- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCCO_H2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCCO_H2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCCO_H2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCCO_H2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCCO_H2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCO_H2012-18)
- 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 (CCGPS) (FCCO_H2012-19)

CONSUMER FINANCE

A - Consumer Income
- analyze sources of income and its relationship to financial goals (GPS) (FCCF_A2010-1)

B - Consumer Finances
- explain the processes involved in managing personal finances (GPS) (FCCF_B2010-2)

C - Consumer Credit
- evaluate types and sources of credit and their impact on the financial well-being of individuals and families (GPS) (FCCF_C2010-3)

D - Consumer Credit Protection
- analyze the impact of debt on personal finances (GPS) (FCCF_D2010-4)

E - Consumer Savings
- critique savings options (GPS) (FCCF_E2010-5)

F - Consumer Investments
- explore investment opportunities (GPS) (FCCF_F2010-6)

G - Consumer Insurance
- compare insurance plans (GPS) (FCCF_G2010-7)

H - Consumer Financial Goals
- analyze the need for financial management to meet goals (GPS) (FCCF_H2010-8)

I - Consumer Spending Decisions
- discuss the importance of the consumer in the marketplace (GPS) (FCCF_I2010-9)

J - Consumer Housing
- assess information related to housing (GPS) (FCCF_J2010-10)
K - Consumer Transportation
• assess information related to transportation (GPS) (FCCF_K2010-11)

L - Consumer Taxes
• investigate various tax responsibilities (GPS) (FCCF_L2010-12)

M - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCCF_M2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCCF_M2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCCF_M2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCCF_M2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCCF_M2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCCF_M2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCCF_M2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCCF_M2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCCF_M2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCF_M2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCCF_M2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCF_M2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCCF_M2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCCF_M2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCCF_M2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCCF_M2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCCF_M2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCF_M2012-18)
• 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 (CCGPS) (FCCF_M2012-19)
CONSUMER SKILLS

A - Consumer Rights and Responsibilities
• identify consumer rights and responsibilities (GPS) (FCCS_A2010-1)

B - Consumer Information
• analyze sources of consumer information and types provided (GPS) (FCCS_B2010-2)

C - Consumers and the Media
• describe the role of the media in the economic system (GPS) (FCCS_C2010-3)

D - Consumers and Advertisement
• investigate advertising in the economic system (GPS) (FCCS_D2010-4)

E - Consumer Fraud
• evaluate fraudulent practices (GPS) (FCCS_E2010-5)

F - Consumer Product Information
• identify different types of market research and testing (GPS) (FCCS_F2010-6)
• analyze a consumer product by comparing labeling, packaging, and support material (GPS) (FCCS_F2010-7)
• explore ways to educate consumers on features, use, and care of selected products (GPS) (FCCS_F2010-8)
• compare and contrast sales techniques that assist consumers in the selection of goods and services (GPS) (FCCS_F2010-9)
• identify factors to be considered in consumer product safety (GPS) (FCCS_F2010-10)

G - Consumer Problem Resolution
• analyze different types of consumer problem resolution (GPS) (FCCS_G2010-11)

H - Consumer Ethics
• analyze the role of ethics in consumer decisions (GPS) (FCCS_H2010-12)

I - Consumer Advocacy
• evaluate the consumer advocacy process (GPS) (FCCS_I2010-13)

J - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCCS_J2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCCS_J2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCCS_J2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCCS_J2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCCS_J2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCCS_J2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCCS_J2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCCS_J2012-8)
**J - Literacy Standards (continued)**

- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCCS_J2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCS_J2012-10)
- write arguments focused on discipline-specific content (CCGPS) (FCCS_J2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCS_J2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCCS_J2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCCS_J2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCCS_J2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCCS_J2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCCS_J2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCS_J2012-18)
- 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 (CCGPS) (FCCS_J2012-19)

**CONTEMPORARY ISSUES IN EDUCATION**

**A -**

- analyze career paths in the area of education (GPS) (FCCI_A2009-1)
- apply disciplinary knowledge from the humanities and social sciences to interpret the meanings of education and schooling in diverse and contemporary contexts (GPS) (FCCI_A2009-2)
- analyze the presence of societal and cultural influences in contemporary educational thought and practice (GPS) (FCCI_A2009-3)
- apply critical perspectives on the educational system (GPS) (FCCI_A2009-4)
- describe how moral principles related to democratic institution can inform and direct schooling practice, leadership, and governance (GPS) (FCCI_A2009-5)
- describe the significance of diversity in a democratic society and how that society influences instruction, school leadership, and governance (GPS) (FCCI_A2009-6)
- describe how ethical, philosophical, and moral commitments affect the process of evaluation at all levels of schooling practice, leadership, and governance (GPS) (FCCI_A2009-7)
- describe how participation in individual and organizational efforts maintain and enhance U.S. schools as institutions in a democratic society (GPS) (FCCI_A2009-8)
- evaluate the moral, social, and political dimensions of contemporary classrooms, teaching, and schools as they relate to life in democratic society (GPS) (FCCI_A2009-9)
- describe how issues such as justice, social inequality, concentration of power, class differences, race and ethnic relations, and family and community organization affect teaching and schooling (GPS) (FCCI_A2009-10)
- describe moral and philosophical assumptions underlying an assessment and evaluation process (GPS) (FCCI_A2009-11)
B - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCCI_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCCI_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCCI_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCCI_B2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCCI_B2012-5)
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- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCI_B2012-10)
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- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCI_B2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCCI_B2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCCI_B2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCCI_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCCI_B2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCCI_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCI_B2012-18)
- 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 (CCGPS) (FCCI_B2012-19)

CULINARY ARTS I

A -

- examine the role of hospitality and food service industry and the role of the modern kitchen (GPS) (FCA1_A2009-1)
- demonstrate and practice food sanitation and safety with food preparation and service (GPS) (FCA1_A2009-2)
- apply basic knowledge of selecting, using, and maintaining professional kitchen equipment (GPS) (FCA1_A2009-3)
- apply basic knowledge in business and culinary math skills (GPS) (FCA1_A2009-4)
- identify and demonstrate the principles and processes of cooking in a professional kitchen (GPS) (FCA1_A2009-5)
A - (continued)

- analyze and demonstrate cooking methods, techniques, and preparations such as dry heat and moist heat methods (GPS) (FCA1_A2009-6)
- identify and apply fundamentals of baking in the preparation and production of baked food products and identify and use equipment normally found in the bake shop (GPS) (FCA1_A2009-7)
- analyze the nutritional concepts that relate to a balanced and healthy diet, covering the six major classes of nutrients in developing a personalized healthy diet plan (GPS) (FCA1_A2009-8)
- identify and apply front of the house techniques and methods of operation used in today’s modern high pace, high volume restaurants (GPS) (FCA1_A2009-9)
- apply fundamentals of human relations and management skills in both personal and professional aspects and levels (GPS) (FCA1_A2009-10)
- identify and apply fundamentals for menu planning, purchasing, receiving, inventory, and storage (GPS) (FCA1_A2009-11)
- identify and examine the role of Garde Manger and Pantry kitchen, demonstrating cold food skills and techniques used by the Garde Manger Chef (GPS) (FCA1_A2009-12)

B - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCA1_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCA1_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCA1_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCA1_B2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCA1_B2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCA1_B2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCA1_B2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCA1_B2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCA1_B2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCA1_B2012-10)
- write arguments focused on discipline-specific content (CCGPS) (FCA1_B2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCA1_B2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCA1_B2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCA1_B2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCA1_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCA1_B2012-16)
B - Literacy Standards (continued)

- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCA1_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCA1_B2012-18)
- 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 (CCGPS) (FCA1_B2012-19)

CULINARY ARTS II

A -

- identify skills, certifications, and experience required for careers in the hospitality, tourism, and food service industries (GPS) (FCA2_A2009-1)
- examine and apply the principals of food sanitation and safety in food service operations and kitchen environments to achieve a nationally recognized food safety certification (GPS) (FCA2_A2009-2)
- demonstrate and master commercial food preparation of all menu categories to produce a variety of food products (GPS) (FCA2_A2009-3)
- explain and practice Garde Manger (GPS) (FCA2_A2009-4)
- demonstrate and master the commercial preparation of all fundamental bakery categories to produce a variety of baked, pastry, and dessert products (GPS) (FCA2_A2009-5)
- identify and apply practices required for menu planning and development, purchasing and receiving, cost control and analysis, and marketing functions in quality food service operations (GPS) (FCA2_A2009-6)
- identify and apply basic nutritional information on the effects of the structures and functions of nutrients before, during, and after food preparation and processing (GPS) (FCA2_A2009-7)
- identify and apply dining room operations (GPS) (FCA2_A2009-8)
- identify and demonstrate practices required for commercial food service operations management (GPS) (FCA2_A2009-9)

B - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCA2_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCA2_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCA2_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCA2_B2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCA2_B2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCA2_B2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCA2_B2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCA2_B2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCA2_B2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCA2_B2012-10)
**B - Literacy Standards (continued)**
- write arguments focused on discipline-specific content (CCGPS) (FCA2_B2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCA2_B2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCA2_B2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCA2_B2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCA2_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCA2_B2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCA2_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCA2_B2012-18)
- 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 (CCGPS) (FCA2_B2012-19)

**EXAMINING THE TEACHING PROFESSION**

**A - Career Awareness**
- analyze career paths in the field of education (GPS) (FCCE_A2009-1)

**B - Society and Culture**
- describe the historical perspective of U.S. public education (GPS) (FCCE_B2009-2)

**C - Professionalism**
- analyze the professional practices and standards related to working in the field of education (GPS) (FCCE_C2009-3)

**D - Integration of Technology and Instruction**
- describe current technologies that are directly related to effective teaching methods (GPS) (FCCE_D2009-4)

**E - Classroom Climate**
- create an effective learning environment (GPS) (FCCE_E2009-5)

**F - Instruction for all Learners**
- plan instructional opportunities adapted to diverse learners (GPS) (FCCE_F2009-6)
- analyze procedures and strategies providing effective learning opportunities for all students (GPS) (FCCE_F2009-7)
- plan instruction based on knowledge of subject matter, students, community, and performance standards (GPS) (FCCE_F2009-8)
- identify, assess, and evaluate evidence that a student has or has not met performance standards (GPS) (FCCE_F2009-9)

**G - Parental Involvement**
- analyze procedures to promote active parent involvement in the school setting (GPS) (FCCE_G2009-10)

**H - Literacy Standards**
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCCE_H2012-1)
H - Literacy Standards (continued)

- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCCE_H2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCCE_H2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCCE_H2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCCE_H2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCCE_H2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCCE_H2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCCE_H2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCCE_H2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCE_H2012-10)
- write arguments focused on discipline-specific content (CCGPS) (FCCE_H2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCE_H2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCCE_H2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCCE_H2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCCE_H2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCCE_H2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCCE_H2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCE_H2012-18)
- 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 (CCGPS) (FCCE_H2012-19)

FCS PATHWAY ESSENTIALS

A - Careers

- analyze the knowledge, skills, and practices focused on career pathways: Early Childhood Education, Teaching, Culinary Arts, Nutrition and Food Science, Consumer and Finance, Interior Design, and Fashion (GPS) (FCPE_A2009-1)

B - Early Childhood Education

- analyze human growth and development and demonstrate the integration of knowledge, skills, and practices of the caregiver-educator roles (GPS) (FCPE_B2009-2)
Family and Consumer Science

C - Culinary Arts
• demonstrate food preparation and service knowledge and skills (GPS) (FCPE_C2009-3)

D - Nutrition and Food Science
• apply principles of food science, food technology, and nutrition and their relationships to growth, development, health, and wellness to support informed decision-making that promotes good health (GPS) (FCPE_D2009-4)

E - Consumer and Finance
• identify and discuss social and financial skills needed to develop personal independence and interpersonal relationships (GPS) (FCPE_E2009-5)
• analyze factors (social, psychological, economic, and cultural) affecting consumer and management decisions for individuals and families and how those decisions impact society (GPS) (FCPE_E2009-6)

F - Interior Design
• analyze factors (social, psychological, economic, and cultural) affecting housing and interior design decisions for individuals and families and how those decisions impact society (GPS) (FCPE_F2009-7)

G - Fashion
• analyze factors (social, psychological, economic, and cultural) affecting textile and apparel decisions for individuals and families and how those decisions impact society (GPS) (FCPE_G2009-8)

H - Family, Community, and Global Leadership
• demonstrate teamwork, leadership skills, and knowledge to become leaders in the family, workplace, and community (GPS) (FCPE_H2009-9)

I - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCPE_I2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCPE_I2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCPE_I2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCPE_I2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCPE_I2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCPE_I2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCPE_I2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCPE_I2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCPE_I2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCPE_I2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCPE_I2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCPE_I2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCPE_I2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCPE_I2012-14)
I - Literacy Standards (continued)

- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCPE_I2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCPE_I2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCPE_I2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCPE_I2012-18)
- 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 (CCGPS) (FCPE_I2012-19)

FOOD AND NUTRITION THROUGH THE LIFESPAN

A -

- design and apply a dietary plan (GPS) (FCFN_A2009-1)
- analyze the requirements of maternal and fetal nutrition during pregnancy (GPS) (FCFN_A2009-2)
- describe the proper feeding of newborns by analyzing nutritional requirements and potential deficiencies of mother and child during the first weeks after birth (GPS) (FCFN_A2009-3)
- develop and analyze a nutritionally balanced diet for infants from birth through the first year of life (GPS) (FCFN_A2009-4)
- explain the nutritional requirements of the stages of childhood (GPS) (FCFN_A2009-5)
- explain the nutritional requirements of the adolescent diet (GPS) (FCFN_A2009-6)
- explain the nutritional requirements of the middle adult years (GPS) (FCFN_A2009-7)
- explain the nutritional requirements of the aging individual (GPS) (FCFN_A2009-8)
- identify careers in foods and nutrition (GPS) (FCFN_A2009-9)

B - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCFN_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCFN_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCFN_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCFN_B2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCFN_B2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCFN_B2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCFN_B2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCFN_B2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCFN_B2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCFN_B2012-10)
**B - Literacy Standards (continued)**

- write arguments focused on discipline-specific content (CCGPS) (FCFN_B2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCFN_B2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCFN_B2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCFN_B2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCFN_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCFN_B2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCFN_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCFN_B2012-18)
- 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 (CCGPS) (FCFN_B2012-19)

**FOOD SCIENCE**

**A -**

- describe the importance of the study of food science and evaluate careers related to food science (GPS) (FCFS_A2009-1)
- discuss how and why scientific evaluation of foods is conducted (GPS) (FCFS_A2009-2)
- discuss the basic chemistry concepts of food science (GPS) (FCFS_A2009-3)
- discuss how energy works in food preparation and preservation (GPS) (FCFS_A2009-4)
- discuss why water and pH are important factors in food preparation and preservation (GPS) (FCFS_A2009-5)
- discuss why carbohydrates are important in food preparation and preservation (GPS) (FCFS_A2009-6)
- analyze why lipids are an important ingredient in food preparation and preservation (GPS) (FCFS_A2009-7)
- discuss why proteins are important in food preparation and preservation (GPS) (FCFS_A2009-8)
- analyze vitamins, minerals, and phytochemicals and their impact on food preparation and preservation (GPS) (FCFS_A2009-9)
- analyze food additives and food analogs in food preparation and in processed products (GPS) (FCFS_A2009-10)
- discuss the principles of fermentation (GPS) (FCFS_A2009-11)
- describe the principles of food safety and identify intervention procedures to maintain safe food (GPS) (FCFS_A2009-12)
- compare and contrast different food preservation methods and the resultant quality of preserved food (GPS) (FCFS_A2009-13)
- examine emerging technology in the field of food science (GPS) (FCFS_A2009-14)

**B - Literacy Standards**

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCFS_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCFS_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCFS_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCFS_B2012-4)
B - Literacy Standards (continued)

- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCFS_B2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCFS_B2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCFS_B2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCFS_B2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCFS_B2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCFS_B2012-10)
- write arguments focused on discipline-specific content (CCGPS) (FCFS_B2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCFS_B2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCFS_B2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCFS_B2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCFS_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCFS_B2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCFS_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCFS_B2012-18)
- 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 (CCGPS) (FCFS_B2012-19)

FOOD, NUTRITION, AND WELLNESS

A -

- analyze basic nutrient requirements and their use in dietary planning (GPS) (FCNW_A2009-1)
- evaluate the effects of eating disorders on the body and the family (GPS) (FCNW_A2009-2)
- identify the factors that affect food choices and dietary quality (GPS) (FCNW_A2009-3)
- utilize the My Pyramid to demonstrate serving sizes and recommended daily intake of different food groups (GPS) (FCNW_A2009-4)
- apply the dietary guidelines throughout the lifespan as they relate to modern life (GPS) (FCNW_A2009-5)
- analyze the importance of the Nutrition Facts panel on a label and identify number of servings per container (GPS) (FCNW_A2009-6)
- examine and discuss the health risks of an unhealthy lifestyle, dietary choices, and unbalanced nutritional intake (GPS) (FCNW_A2009-7)
- demonstrate principles of wellness and fitness as they relate to a well-balanced diet, knowledge of nutrition, and calorie burning (GPS) (FCNW_A2009-8)
A – (continued)

- discuss food safety in the kitchen, including cross-contamination and the risks associated with lack of human cleanliness in creating food-borne illnesses (GPS) (FCNW_A2009-9)
- demonstrate safe food sanitation procedures (GPS) (FCNW_A2009-10)
- demonstrate safe and appropriate use of commercial cooking equipment and smallwares (GPS) (FCNW_A2009-11)

B - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCNW_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCNW_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCNW_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCNW_B2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCNW_B2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCNW_B2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCNW_B2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCNW_B2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCNW_B2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCNW_B2012-10)
- write arguments focused on discipline-specific content (CCGPS) (FCNW_B2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCNW_B2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCNW_B2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCNW_B2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCNW_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCNW_B2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCNW_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCNW_B2012-18)
- 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 (CCGPS) (FCNW_B2012-19)
FOUNDATIONS OF INTERIOR DESIGN

A -
• explore and identify career options within the field of interior design (GPS) (FCID_A2009-1)
• discuss issues of professional practice as related to the field of interior design (GPS) (FCID_A2009-2)
• describe skills that are necessary to have a successful designer-client relationship (GPS) (FCID_A2009-3)
• explain the principles and elements of design (GPS) (FCID_A2009-4)
• explore floor plans and their importance in interior design (GPS) (FCID_A2009-5)
• discuss space planning and traffic patterns (GPS) (FCID_A2009-6)
• demonstrate programming concepts that pertain to residential design (GPS) (FCID_A2009-7)
• demonstrate programming concepts that pertain to commercial design (GPS) (FCID_A2009-8)
• evaluate the relationship of human factors in interior design projects (GPS) (FCID_A2009-9)
• apply the use of technology as related to the study of interior design (GPS) (FCID_A2009-10)

B - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCID_B2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCID_B2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCID_B2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCID_B2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCID_B2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCID_B2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCID_B2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCID_B2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCID_B2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCID_B2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCID_B2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCID_B2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCID_B2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCID_B2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCID_B2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCID_B2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCID_B2012-17)
**B - Literacy Standards (continued)**
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCID_B2012-18)
- 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 (CCGPS) (FCID_B2012-19)

**HEALTH, SAFETY, AND NUTRITION FOR THE YOUNG CHILD**

**A - Employment Opportunities and Professional Issues**
- analyze employment opportunities and professional characteristics for the field of early childhood education (GPS) (FCHS_A2009-1)

**B - Safety**
- provide a safe environment for children (GPS) (FCHS_B2009-2)

**C - Health**
- provide a healthy environment for children (GPS) (FCHS_C2009-3)

**D - Nutrition**
- plan, prepare, and serve nutritious food based on USDA standards to promote children’s growth and development (GPS) (FCHS_D2009-4)

**E - Child Abuse**
- identify symptoms of and protocol for reporting abuse and neglect of young children (GPS) (FCHS_E2009-5)

**F - Communicable Illnesses**
- identify communicable disease process (GPS) (FCHS_F2009-6)
- demonstrate infection control procedures (GPS) (FCHS_F2009-7)

**G - Creating Quality Environments**
- identify components of a safe environment in an early childhood setting (GPS) (FCHS_G2009-8)
- develop lesson plans for teaching health and safety concepts that meet DHR/Bright from the Start/OSHA standards (GPS) (FCHS_G2009-9)

**H - Literacy Standards**
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCHS_H2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCHS_H2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCHS_H2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCHS_H2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCHS_H2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCHS_H2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCHS_H2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCHS_H2012-8)
H - Literacy Standards (continued)

- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCHS_H2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCHS_H2012-10)
- write arguments focused on discipline-specific content (CCGPS) (FCHS_H2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCHS_H2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCHS_H2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCHS_H2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCHS_H2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCHS_H2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCHS_H2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCHS_H2012-18)
- 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 (CCGPS) (FCHS_H2012-19)

HUMAN GROWTH AND DEVELOPMENT FOR EARLY CHILDHOOD

A - Career Decisions

- analyze possible career decisions that reflect personal, family, and career goals (GPS) (FCHG_A2009-1)

B - Newborn Growth, Development, and Care

- explore the growth, development, and care of the newborn (GPS) (FCHG_B2009-2)

C - Infant Growth, Development, and Care

- analyze the growth, development, and care of the infant (GPS) (FCHG_C2009-3)

D - Toddler Growth and Development

- investigate the growth and development of the toddler (GPS) (FCHG_D2009-4)

E - Preschool Child Growth and Development

- examine the growth and development of the preschool child (GPS) (FCHG_E2009-5)

F - Observation

- observe and assess behavior and development of children (GPS) (FCHG_F2009-6)

G - Developmentally Appropriate Practice in a Learning Environment

- identify characteristics of age-appropriate curriculum (GPS) (FCHG_G2009-7)
- describe a well-organized environment conducive to student learning (GPS) (FCHG_G2009-8)
- identify appropriate materials and equipment for a child care center (GPS) (FCHG_G2009-9)
- analyze ways to encourage and guide the creative development of children ages birth to five years of age (GPS) (FCHG_G2009-10)
- describe an appropriate daily routine in an early childhood setting (GPS) (FCHG_G2009-11)
H - Guidance Techniques
• identify developmentally appropriate guidance techniques in an early childhood education (GPS) (FCHG_H2009-12)

I - Introduction to Children with Special Needs
• identify various aspects of working with children with special needs (GPS) (FCHG_I2009-13)

J - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCHG_J2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCHG_J2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCHG_J2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCHG_J2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCHG_J2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCHG_J2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCHG_J2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCHG_J2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCHG_J2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCHG_J2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCHG_J2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCHG_J2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCHG_J2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCHG_J2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCHG_J2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCHG_J2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCHG_J2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCHG_J2012-18)
• 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 (CCGPS) (FCHG_J2012-19)
INTERIOR DESIGN FURNISHINGS, MATERIALS, AND COMPONENTS

A -
• explore and identify career options within the field of interior design as related to furnishings, materials, and components (GPS) (FCFM_A2009-1)
• distinguish historical characteristics of furnishings and accessories as well as architectural styles by period and designer from antiquity to 21st century (GPS) (FCFM_A2009-2)
• analyze the importance of appropriate finishes and materials needed for interior environments (GPS) (FCFM_A2009-3)
• describe the selection process and resources for interior wall space (GPS) (FCFM_A2009-4)
• describe the basic principles of lighting design and its application for residential and commercial projects (GPS) (FCFM_A2009-5)
• describe the function and purpose of window treatments (GPS) (FCFM_A2009-6)
• identify functional work centers for kitchen planning and evaluate the need for component selections for commercial and residential design (GPS) (FCFM_A2009-7)
• identify and compare functional fixtures and finishes for residential and commercial bathrooms (GPS) (FCFM_A2009-8)
• analyze professional practices, procedures for business profitability and career success, and the role of ethics in the interiors and furnishings industries (GPS) (FCFM_A2009-9)

B - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCFM_B2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCFM_B2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCFM_B2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCFM_B2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCFM_B2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCFM_B2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCFM_B2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCFM_B2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCFM_B2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCFM_B2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCFM_B2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCFM_B2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCFM_B2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCFM_B2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCFM_B2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCFM_B2012-16)
B - Literacy Standards (continued)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCFM_B2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCFM_B2012-18)
• 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 (CCGPS) (FCFM_B2012-19)

INTRODUCTION TO CULINARY ARTS

A -
• examine and identify the history and philosophy of the food service industry (GPS) (FCCA_A2009-1)
• demonstrate and practice correct sanitation as it relates to healthy living and the modern commercial kitchen (GPS) (FCCA_A2009-2)
• identify and describe various fixed equipment and small wares associated with the commercial kitchen (GPS) (FCCA_A2009-3)
• analyze and examine fundamental safety skills and practices related to the commercial kitchen (GPS) (FCCA_A2009-4)
• apply math skills through recipe conversion and measurements (GPS) (FCCA_A2009-5)
• perform all aspects of kitchen knife use and classic knife skills (GPS) (FCCA_A2009-6)
• perform basic food preparations of poultry, meat, dairy, fruits, and vegetables using proper commercial kitchen equipment and techniques (GPS) (FCCA_A2009-7)
• examine and identify standardized recipes and their role in a commercial kitchen (GPS) (FCCA_A2009-8)
• identify and explain six major classes of nutrients, proteins, and carbohydrates: simple, complex, fats, vitamins, minerals, and water (GPS) (FCCA_A2009-9)
• identify various food products used in a commercial foodservice operation and list the proper handling and storage procedures for each (GPS) (FCCA_A2009-10)
• practice sound human relations and professionalism for a career pathway in culinary arts employment (GPS) (FCCA_A2009-11)

B - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (FCCA_B2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (FCCA_B2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (FCCA_B2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (FCCA_B2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (FCCA_B2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (FCCA_B2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (FCCA_B2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (FCCA_B2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCCA_B2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCA_B2012-10)
B - Literacy Standards (continued)
• write arguments focused on discipline-specific content (CCGPS) (FCCA_B2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCA_B2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (FCCA_B2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (FCCA_B2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (FCCA_B2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (FCCA_B2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (FCCA_B2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCA_B2012-18)
• 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 (CCGPS) (FCCA_B2012-19)

INTRODUCTION TO EARLY CHILDHOOD CARE AND EDUCATION

A - Career Paths
• analyze career paths within the early childhood education field (GPS) (FCCC_A2009-1)

B - Historical Perspective
• identify major contributors to the field of early childhood care and education and analyze their implications for educational and childcare practices (GPS) (FCCC_B2009-2)

C - Professional Work Ethics
• identify and practice professional work ethics (GPS) (FCCC_C2009-3)

D - Guidance and Collaborative Relationships
• demonstrate techniques for positive collaborative relationships with children (GPS) (FCCC_D2009-4)

E - Cultural Diversity and Special Needs
• explain appropriate methods of responding to cultural diversity in the learning environment (GPS) (FCCC_E2009-5)
• determine ways to adapt the curriculum and classroom for children with special needs (GPS) (FCCC_E2009-6)

F - Routines and Transitional Activities
• create and utilize routines and transitional techniques with children (GPS) (FCCC_F2009-7)

G - Program Management and Curriculum
• demonstrate integration of curriculum and instruction to meet children’s developmental needs and interests (GPS) (FCCC_G2009-8)

H - Learning Environments
• determine components of a well organized, developmentally appropriate learning environment (GPS) (FCCC_H2009-9)

I - Licensing and Accreditation
• analyze licensing and accreditation standards (GPS) (FCCC_I2009-10)
J - Professional Portfolio Guidelines
• demonstrate professional development planning (GPS) (FCCC_J2009-11)

K - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any
gaps or inconsistencies in the account (CCGPS) (FCCC_K2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by
paraphrasing them in simpler but still accurate terms (CCGPS) (FCCC_K2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations
in the text (CCGPS) (FCCC_K2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical
context relevant to grade-level texts and topics (CCGPS) (FCCC_K2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the
information or ideas (CCGPS) (FCCC_K2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying
important issues that remain unresolved (CCGPS) (FCCC_K2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,
multimedia) in order to address a question or solve a problem (CCGPS) (FCCC_K2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or
challenging conclusions with other sources of information (CCGPS) (FCCC_K2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process,
phenomenon, or concept, resolving conflicting information when possible (CCGPS) (FCCC_K2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (FCCC_K2012-10)
• write arguments focused on discipline-specific content (CCGPS) (FCCC_K2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (FCCC_K2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and
audience (CCGPS) (FCCC_K2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on
addressing what is most significant for a specific purpose and audience (CCGPS) (FCCC_K2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to
ongoing feedback, including new arguments or information (CCGPS) (FCCC_K2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a
problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating
understanding of the subject under investigation (CCGPS) (FCCC_K2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the
strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text
selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format
for citation (CCGPS) (FCCC_K2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (FCCC_K2012-18)
• 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 (CCGPS) (FCCC_K2012-19)

TEXTILE SCIENCE

A -
• examine the various career paths within the textile industry (GPS) (FCTS_A2009-1)
• investigate textiles for interiors, furnishings, and industrial use from a historic perspective to current applications (GPS)
(FCTS_A2009-2)
A – (continued)

- describe and recognize fiber characteristics and properties (GPS) (FCTS_A2009-3)
- examine and identify the fabrication and properties of yarns (GPS) (FCTS_A2009-4)
- identify textiles according to construction methods for the appropriate application in interiors (GPS) (FCTS_A2009-5)
- describe textile finishes and analyze the methods of finishing (GPS) (FCTS_A2009-6)
- describe the characteristics and maintenance concepts of textile products in interior and living environments (GPS) (FCTS_A2009-7)
- identify the appropriate use of textiles (GPS) (FCTS_A2009-8)
- investigate how trends and color forecasting are used in the development of new products (GPS) (FCTS_A2009-9)
- discuss the continuing use of technology in advancing textile products using innovative skills and tests (GPS) (FCTS_A2009-10)
- identify legislation on the federal, state, and local levels that regulate the textile industry (GPS) (FCTS_A2009-11)
BEGINNING BAND

A - Tone Production
- demonstrate characteristic tone quality (QCC) (IMBB_A2005-1)
- demonstrate proper posture and hand positions, embouchure, and breath support (QCC) (IMBB_A2005-2)
- tune instrument to appropriate sound sources and/or electronic tuners (QCC) (IMBB_A2005-3)

B - Rhythm
- count rhythmically and maintain tempo (IMBB_B2005-4)
- perform and count in simple (2/4, 3/4, 4/4) and compound (3/8, 6/8, 9/8) meters (IMBB_B2005-5)
- perform a range of note values from whole notes to sixteenth notes (IMBB_B2005-6)
- perform simple syncopated rhythms (IMBB_B2005-7)

C - Technique
- perform the F, Bb, Eb, and Ab major scales and arpeggios at least one octave and perform a chromatic scale at least 1½ octaves (QCC) (IMBB_C2005-8)
- demonstrate frequently used articulations (tongue, slur, accent, staccato, and legato) (IMBB_C2005-9)
- demonstrate proficiency in mallet, bass drum, and basic accessory techniques (percussionists) (IMBB_C2005-10)
- perform snare drum rudiments which correlate with music literature studied (percussionists) (IMBB_C2005-11)

D - Style
- perform and understand phrase and melodic structures (QCC) (IMBB_D2005-12)
- perform music from variety of musical genres (march, chorales, jazz, and standard literature) and historical styles (QCC) (IMBB_D2005-13)

E - Theory, History, and Culture
- employ frequently used musical terms and symbols (QCC) (IMBB_E2005-14)
- identify notes in appropriate staff, enharmonic equivalents, and concert pitch for personal instrument (IMBB_E2005-15)
- explore improvisation of melodies within scales and key signatures (QCC, CE) (IMBB_E2005-16)
- create, notate, and perform simple composition for a chosen instrument (QCC, CE) (IMBB_E2005-17)
- recognize harmonic structure and its performance role (QCC) (IMBB_E2005-18)
- demonstrate form in music repertoire (QCC) (IMBB_E2005-19)
- interpret relevant historical, biographical, and multicultural information regarding music performed (QCC, CE) (IMBB_E2005-20)
- describe the evolution and history of band instruments (QCC) (IMBB_E2005-21)

F - Ensemble Performance Skills
- respond appropriately to conducting techniques used by the director (QCC) (IMBB_F2005-22)
- perform class repertoire at expected competency level and sight-read one grade level below average performance level (QCC) (IMBB_F2005-23)
- perform as part of an ensemble (QCC) (IMBB_F2005-24)

G - Synthesis
- demonstrate proper care and maintenance of instrument (CE) (IMBB_G2005-25)
- use print, non-print and technological media to access musical information (QCC) (IMBB_G2005-26)
- demonstrate responsibility to the group through attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (CE) (IMBB_G2005-27)
- critique music performed by ensemble and suggest ways to improve (QCC, CE) (IMBB_G2005-28)
G - Synthesis (continued)
• demonstrate an awareness of careers in music (QCC, CE) (IMBB_G2005-29)

INTERMEDIATE BAND/CONCERT BAND

A - Tone Production
• refine characteristic tone quality and identification of all band instrument timbres (QCC) (IMCB_A2005-1)
• demonstrate proper posture, hand position, embouchure, breath support, and vibrato appropriate to instrument (QCC) (IMCB_A2005-2)
• tune instrument to appropriate sound sources and/or electronic tuners (QCC) (IMCB_A2005-3)
• demonstrate acceptable intonation individually and in an ensemble (IMCB_A2005-4)

B - Rhythm
• count rhythmically and maintain tempo (IMCB_B2005-5)
• perform and count simple (2/4, 3/4, 4/4), compound (3/8, 6/8, 9/8), and mixed (5/8, 7/8) meters (IMCB_B2005-6)

C - Technique
• perform all major scales and arpeggios and chromatic scale over full range of instrument (QCC) (IMCB_C2005-7)
• perform selected minor scales appropriate to class literature or performance (QCC) (IMCB_C2005-8)
• demonstrate frequently used articulations at increasingly quick tempos and perform double tonguing where appropriate (IMCB_C2005-9)
• respond appropriately to all dynamic markings and produce acceptable dynamic control (QCC) (IMCB_C2005-10)
• perform on snare drum, mallet, bass drum, timpani, and basic accessory techniques proficiently (percussionists) (IMCB_C2005-11)

D - Style
• perform and understand phrase and melodic structures (QCC) (IMCB_D2005-12)
• perform music from variety of musical genres (march, chorales, jazz, and standard band literature) and historical styles (QCC) (IMCB_D2005-13)

E - Theory, History, and Culture
• employ frequently used musical terms and symbols (QCC) (IMCB_E2005-14)
• identify notes in appropriate staff, their enharmonic equivalents, and concert pitch and transpose for personal instrument (IMCB_E2005-15)
• construct major and minor scales based on whole and half step patterns and explain the relationship between major and minor scales (IMCB_E2005-16)
• explore improvisation of melodies with scales and key signatures (QCC, CE) (IMCB_E2005-17)
• create, notate, and perform a simple composition for chosen instrument(s) of ensemble (QCC, CE) (IMCB_E2005-18)
• recognize harmonic structure and demonstrate an awareness of its role through performance (QCC) (IMCB_E2005-19)
• demonstrate form in music repertoire (QCC) (IMCB_E2005-20)
• incorporate relevant historical, biographical, and multicultural information regarding music performed in class/concert (QCC, CE) (IMCB_E2005-21)
• describe the evolution and history of band instruments (QCC, CE) (IMCB_E2005-22)

F - Synthesis/Application
• demonstrate proper care and maintenance of instrument (CE) (IMCB_F2005-23)
• use print, non-print, and technological media to access musical information (QCC) (IMCB_F2005-24)
• demonstrate responsibility to the group through attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (CE) (IMCB_F2005-25)
F - Synthesis/Application (continued)
• respond appropriately to conducting techniques used by the director (QCC) (IMCB_F2005-26)
• critique music performed by an ensemble and suggest ways to improve (QCC, CE) (IMCB_F2005-27)
• demonstrate music reading skills through performance of class repertoire at expected competency level and sight-read one grade level below average performance level (QCC) (IMCB_F2005-28)
• perform publicly at least twice a year (QCC) (IMCB_F2005-29)
• describe and analyze careers in music (QCC, CE) (IMCB_F2005-30)

SYMPHONIC BAND/SYMPHONIC WINDS/ADVANCED BAND/JAZZ BAND

A - Tone Production
• continue refinement of characteristic tone quality and identification of all band instrument timbres (QCC) (IMAB_A2005-1)
• demonstrate proper posture and position, embouchure, breath support, and vibrato appropriate to instrument (QCC) (IMAB_A2005-2)
• tune instrument to appropriate sound sources and/or electronic tuners (QCC) (IMAB_A2005-3)
• demonstrate acceptable level of intonation in playing alone and in ensembles (QCC) (IMAB_A2005-4)

B - Rhythm
• count rhythmically and maintain tempo (IMAB_B2005-5)
• perform and count in simple (2/4, 3/4, 4/4), compound (3/8, 6/8, 9/8), and mixed (5/8 and 7/8) meters and explore hemiola patterns (IMAB_B2005-6)

C - Technique
• perform all major scales and arpeggios and chromatic scale over full range of instrument (QCC) (IMAB_C2005-7)
• perform selected minor scales appropriate to class literature or performance (IMAB_C2005-8)
• demonstrate frequently used articulations at increasingly quick tempos and perform double tonguing where appropriate (IMAB_C2005-9)
• respond appropriately to all dynamic markings and produce acceptable dynamic control (QCC) (IMAB_C2005-10)
• demonstrate proficiency on snare drum rudiments, timpani tuning from one given pitch, drum set techniques, four mallet techniques (major and minor scales), and multicultural percussion techniques (IMAB_C2005-11)

D - Style
• demonstrate understanding of phrase and melody through performance (QCC) (IMAB_D2005-12)
• perform music from a variety of musical genres (march, chorales, jazz, and standard band literature) and historical styles (QCC) (IMAB_D2005-13)

E - Theory, History, and Culture
• employ frequently used musical terms and symbols (QCC) (IMAB_E2005-14)
• identify advanced enharmonic equivalents through use of double sharps and double flats (IMAB_E2005-15)
• construct major and minor scales based on whole and half step patterns and explain the relationship between major and minor scales (IMAB_E2005-16)
• explore improvisation of melodies with scales and key signatures studied (QCC, CE) (IMAB_E2005-17)
• create, notate, and perform a simple composition for chosen instrument(s) of ensemble (QCC, CE) (IMAB_E2005-18)
• recognize and apply harmonic structure and demonstrate an awareness of its role through performance (QCC) (IMAB_E2005-19)
• demonstrate form in music repertoire (QCC) (IMAB_E2005-20)
• incorporate relevant historical, biographical, and multicultural information regarding music performed in class/concert (QCC, CE) (IMAB_E2005-21)
• describe the evolution and history of band instruments (QCC) (IMAB_E2005-22)
F - Synthesis/Application

- demonstrate proper care and maintenance of instrument (CE) (IMAB_F2005-23)
- use computer/MIDI workstation to transcribe, edit, compose, and perform music (QCC) (IMAB_F2005-24)
- demonstrate responsibility to group through attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (CE) (IMAB_F2005-25)
- respond appropriately to conducting techniques used by the director (QCC) (IMAB_F2005-26)
- critique music performed by an ensemble and suggest ways to improve (QCC, CE) (IMAB_F2005-27)
- demonstrate music reading skills through performance of class repertoire at expected competency level and sight-read one grade level below average performance level (QCC) (IMAB_F2005-28)
- perform publicly at least twice a year (QCC) (IMAB_F2005-29)
- describe and analyze careers in music (QCC, CE) (IMAB_F2005-30)

ADVANCED CHORAL ENSEMBLE

A - Individual Performance Skills

- demonstrate mastery of open vowel and clear consonant sounds (QCC) (VMMC_A2005-1)
- sing with tone quality appropriate to physical maturity and level of expertise (QCC) (VMMC_A2005-2)
- apply knowledge of phrase and musical structures (VMMC_A2005-3)
- employ correct vocal production habits (QCC) (VMMC_A2005-4)
- project stage presence that exhibits visual poise, stance, and knowledge of music performed (QCC, CE) (VMMC_A2005-5)
- exhibit principles of good vocal health maintenance (CE) (VMMC_A2005-6)

B - Ensemble Performance Skills

- sing with consistently accurate intonation (QCC) (VMMC_B2005-7)
- sing a harmony part independently with and without accompaniment (QCC) (VMMC_B2005-8)
- utilize individual listening skills to achieve blend and balance within the section and choir (VMMC_B2005-9)
- discriminate in vowel quality to produce proper blend (VMMC_B2005-10)
- exhibit confidence, concentration, and focus in both rehearsal and performance settings (CE) (VMMC_B2005-11)
- perform music representative of various styles and periods (QCC) (VMMC_B2005-12)
- expand depth and scope of aesthetic judgment by experiencing choral music performances of diverse styles, modes, and genres (VMMC_B2005-13)

C - Music Theory

- project advanced rhythm skills through counting and movement (VMMC_C2005-14)
- sight-read and aurally recognize rhythms which include whole, half, dotted quarter, quarter, dotted eighth, eighth, and sixteenth notes and rests in simple and compound meters (QCC) (VMMC_C2005-15)
- sight-read and aurally recognize examples which include both major and minor scale steps and diatonic intervals (QCC) (VMMC_C2005-16)
- follow a vocal score and respond to its symbols appropriately (VMMC_C2005-17)
- perform major, natural minor, chromatic scales, triads, and arpeggios (QCC) (VMMC_C2005-18)
- respond to dynamics, tempo and articulation, including forte, piano, crescendo, decrescendo, moderato, andante, allegro, legato, and staccato (QCC) (VMMC_C2005-19)
- analyze processes involved in the composition and arrangement of music, such as form and texture (QCC) (VMMC_C2005-20)
- identify differences in scales and harmonies from aural and visual examples (QCC) (VMMC_C2005-21)
- use print and non-print media to locate musical information (QCC) (VMMC_C2005-22)
D - Cultural and Historical Context

- identify a variety of musical styles (QCC) (VMMC_D2005-23)
- identify basic style characteristics (QCC) (VMMC_D2005-24)
- exhibit knowledge of a variety of musical genres (VMMC_D2005-25)
- explore cultural and historical settings of music performed (QCC, CE) (VMMC_D2005-26)
- explore music-related careers (CE) (VMMC_D2005-27)
- demonstrate appropriate audience etiquette (CE) (VMMC_D2005-28)

ADVANCED VOCAL ENSEMBLE

A - Individual Performance Skills

- demonstrate mastery of proper breathing techniques through diaphragmatic breathing (QCC) (VMAE_A2005-1)
- demonstrate mastery of correct vowel and consonant production (QCC) (VMAE_A2005-2)
- sing with consistently excellent intonation and tone quality (QCC) (VMAE_A2005-3)
- sing with consistently well-executed phrasing (VMAE_A2005-4)
- employ correct vocal production habits (VMAE_A2005-5)
- exhibit principles of good vocal health maintenance (CE) (VMAE_A2005-6)

B - Ensemble Performance Skills

- sing written and improvised harmonies independently with and without accompaniment (VMAE_B2005-7)
- utilize individual listening skills to achieve blend and balance within the section and choir (VMAE_B2005-8)
- exhibit concentration and focus in both rehearsal and performance settings (CE) (VMAE_B2005-9)
- perform music for small ensembles which is representative of various styles and periods (QCC) (VMAE_B2005-10)

C - Music Theory

- project advanced rhythm and pitch sight-reading skills, including polyrhythms, accidentals, and modulation (VMAE_C2005-11)
- perform major, natural minor, harmonic minor, melodic minor and chromatic scales, triads, and arpeggios (VMAE_C2005-12)
- respond to symbols and traditional terms referring to dynamics, tempo, articulation, and direction with consistent accuracy (VMAE_C2005-13)
- analyze processes involved in the composition and arrangement of music, such as form and texture (QCC) (VMAE_C2005-14)
- identify differences in scales and harmonies from aural and visual examples (VMAE_C2005-15)
- use print and non-print media to locate musical information (VMAE_C2005-16)

D - Cultural and Historical Context

- perform a variety of musical styles including Renaissance, Baroque, Classical, Romantic, and 20th Century (VMAE_D2005-17)
- identify basic style characteristics (VMAE_D2005-18)
- exhibit knowledge of performance practice in a variety of musical genres (VMAE_D2005-19)
- explore cultural and historical settings of music performed (QCC, CE) (VMAE_D2005-20)
- explore music-related careers (CE) (VMAE_D2005-21)
- demonstrate appropriate audience etiquette (CE) (VMAE_D2005-22)

BEGINNING CHORAL ENSEMBLE

A - Individual Performance Skills

- explore diaphragmatic breathing (VMBC_A2005-1)
- explore concept and use of open vowel and clear consonant sounds (VMBC_A2005-2)

A - Individual Performance Skills (continued)
• sing with tone quality appropriate to physical maturity (VMBC_A2005-3)
• sing from memory (VMBC_A2005-4)
• apply knowledge of phrase and musical structures (VMBC_A2005-5)
• apply aural and vocal skills for matching pitch and singing in tune (QCC) (VMBC_A2005-6)
• employ consistency in correct vocal production habits (VMBC_A2005-7)
• demonstrate correct sitting and standing postures (QCC) (VMBC_A2005-8)
• explore principles of good vocal health maintenance (CE) (VMBC_A2005-9)
• project stage presence that exhibits visual poise, stance, and knowledge of music performed (CE) (VMBC_A2005-10)

B - Ensemble Performance Skills
• sing unison and two-part compositions with good intonation (VMBC_B2005-11)
• utilize individual listening skills to achieve blend and balance within the section and choir (VMBC_B2005-12)
• explore discrimination in vowel quality that will produce proper blend (VMBC_B2005-13)
• exhibit confidence, concentration, and focus in both rehearsal and performance settings (CE) (VMBC_B2005-14)
• perform music representative of various styles and periods (VMBC_B2005-15)
• respond appropriately to conducting techniques used by the director (VMBC_B2005-16)

C - Music Theory
• develop rhythm skills through counting and movement (VMBC_C2005-17)
• engage in simple rhythm sight-reading which includes whole, half, quarter, and eighth notes and rests in simple meter (VMBC_C2005-18)
• engage in simple pitch sight-reading and aural activities which include major and minor scale steps and diatonic intervals (VMBC_C2005-19)
• follow a simple vocal score and respond to its symbols (VMBC_C2005-20)
• perform major, natural minor and chromatic scales, triads, and arpeggios (VMBC_C2005-21)
• explore symbols and traditional terms referring to dynamics, tempo, and articulation, including forte, piano, crescendo, decrescendo, moderato, andante, allegro, legato, and staccato (QCC) (VMBC_C2005-22)
• explore directional symbols and terms, such as repeat signs, first and second endings, da capo, dal segno, and coda (VMBC_C2005-23)
• recognize key signatures and tonality of performed music in major keys (QCC) (VMBC_C2005-24)
• identify various types of voices heard in choral performances (QCC) (VMBC_C2005-25)
• define musical terms as found in choral literature (VMBC_C2005-26)

D - Cultural and Historical Context
• explore a variety of musical styles (QCC) (VMBC_D2005-27)
• identify basic style characteristics (QCC) (VMBC_D2005-28)
• exhibit understanding of a variety of musical genres (VMBC_D2005-29)
• explore cultural and historical settings of music performed (CE) (VMBC_D2005-30)
• identify music-related careers (CE) (VMBC_D2005-31)
• demonstrate appropriate audience etiquette (CE) (VMBC_D2005-32)
INTERMEDIATE CHORAL ENSEMBLE

A - Individual Performance Skills
- refine use of open vowel and clear consonant sounds (VMIC_A2005-1)
- sing with tone quality appropriate to physical maturity (VMIC_A2005-2)
- sing from memory (QCC) (VMIC_A2005-3)
- apply knowledge of phrase and musical structures (VMIC_A2005-4)
- employ correct vocal production habits (VMIC_A2005-5)
- exhibit principles of good vocal health maintenance (CE) (VMIC_A2005-6)
- project stage presence that exhibits visual poise, stance, and knowledge of music performed (CE) (VMIC_A2005-7)

B - Ensemble Performance Skills
- sing unison compositions with good intonation (VMIC_B2005-8)
- sing a harmony part independently with and without accompaniment (VMIC_B2005-9)
- utilize individual listening skills to achieve blend and balance within the section and choir (VMIC_B2005-10)
- exhibit confidence, concentration, and focus in both rehearsal and performance settings (CE) (VMIC_B2005-11)
- perform music representative of various styles and periods (VMIC_B2005-12)
- respond appropriately to conducting techniques used by the director (QCC) (VMIC_B2005-13)

C - Music Theory
- sight-read simple rhythms which include whole, half, quarter, eighth, dotted quarter, and sixteenth notes and rests in simple meter (VMIC_C2005-14)
- sight-read simple pitch in major and minor keys (scale steps, thirds, fourths, fifths, and octaves) (VMIC_C2005-15)
- follow a vocal score and respond to its symbols appropriately (VMIC_C2005-16)
- perform major, natural minor and chromatic scales, triads, and arpeggios (VMIC_C2005-17)
- identify symbols and terms referring to dynamics, tempo and articulation, including forte, piano, crescendo, decrescendo, moderato, andante, allegro, legato, and staccato (VMIC_C2005-18)
- identify formal symbols and terms, such as repeat signs, first and second readings, da capo, dal segno, and coda (VMIC_C2005-19)
- recognize key signature and tonality of performed music in both major and minor keys (VMIC_C2005-20)
- identify various vocal groups (solo, duet, trio, and quartet) (VMIC_C2005-21)
- use print and non-print media to locate musical information (VMIC_C2005-22)

D - Cultural and Historical Context
- explore a variety of musical styles (VMIC_D2005-23)
- identify basic style characteristics (VMIC_D2005-24)
- exhibit knowledge of various musical genres (VMIC_D2005-25)
- explore cultural and historical settings of music performed (CE) (VMIC_D2005-26)
- explore music-related careers (CE) (VMIC_D2005-27)
- demonstrate appropriate audience etiquette (CE) (VMIC_D2005-28)

VOCAL ENSEMBLE

A - Individual Performance Skills
- practice proper diaphragmatic breathing techniques (VMEN_A2005-1)
- demonstrate mastery of correct sitting and standing postures (VMEN_A2005-2)
- demonstrate mastery of correct vowel and consonant productions (VMEN_A2005-3)
- sing with excellent intonation and tone quality (VMEN_A2005-4)
A - Individual Performance Skills (continued)
• sing with well-executed phrasing (VMEN_A2005-5)
• employ correct vocal production habits (VMEN_A2005-6)
• exhibit principles of good vocal health maintenance (CE) (VMEN_A2005-7)

B - Ensemble Performance Skills
• sing written and improvised harmonies independently with and without accompaniment (VMEN_B2005-8)
• utilize individual listening skills to achieve blend and balance within the section and choir (VMEN_B2005-9)
• exhibit concentration and focus in both rehearsal and performance settings (CE) (VMEN_B2005-10)
• perform music for small ensembles which is representative of various styles and periods (QCC) (VMEN_B2005-11)
• perform small ensemble literature including compositions requiring one voice per part (QCC) (VMEN_B2005-12)

C - Music Theory
• project advanced rhythm and pitch sight-reading skills, including polyrhythms, accidentals, and modulations (QCC) (VMEN_C2005-13)
• perform major, natural minor, harmonic minor, melodic minor and chromatic scales, triads, and arpeggios (QCC) (VMEN_C2005-14)
• respond to symbols and traditional terms referring to dynamics, tempo, articulation, and direction with consistent accuracy (VMEN_C2005-15)
• analyze processes involved in the composition and arrangement of music, such as form and texture (QCC) (VMEN_C2005-16)
• identify differences in scales and harmonies from aural and visual examples (QCC) (VMEN_C2005-17)
• use print and non-print media to locate musical information (QCC) (VMEN_C2005-18)

D - Cultural and Historical Context
• identify a variety of musical styles (VMEN_D2005-19)
• exhibit knowledge of a variety of musical genres (VMEN_D2005-20)
• exhibit knowledge of cultural and historical settings of music performed (CE) (VMEN_D2005-21)
• explore music-related careers (CE) (VMEN_D2005-22)
• demonstrate appropriate audience etiquette (CE) (VMEN_D2005-23)

ADVANCED DANCE

A - Technical and Movement Skills
• refine skills in techniques of various dance forms (QCC) (FAAD_A2005-1)
• expand the use of dance terminology through physical, written, and oral expression (QCC) (FAAD_A2005-2)
• describe and apply technical principles of modern dance, ballet, and other dance forms (QCC) (FAAD_A2005-3)
• demonstrate artistry and individuality of expression through various dance styles (QCC, CE) (FAAD_A2005-4)
• create and lead a comprehensive dance warm-up (FAAD_A2005-5)

B - Creative Expression, Choreography, and Performance
• perform and respond with mature understanding of feelings, images, and thoughts through dance (QCC) (FAAD_B2005-6)
• demonstrate knowledge of all elements of dance technique and production necessary for public performance (QCC) (FAAD_B2005-7)
• utilize and create choreographic structures (ABA, Canon) (QCC) (FAAD_B2005-8)
• combine various elements to compose original movement sequences, individually and collaboratively, with attention to mood, meaning, or image (QCC, CE) (FAAD_B2005-9)
• explore improvisation as a choreographic tool (QCC) (FAAD_B2005-10)
C - Cultural and Historical Context
- research and present information regarding dance as a means of expressing cultural values, religious traditions, social mores, and historical periods (QCC, CE) (FAAD_C2005-11)
- identify and analyze classical and modern dance works (QCC) (FAAD_C2005-12)
- compare and contrast Western and non-Western dance works (QCC) (FAAD_C2005-13)

D - Aesthetic Judgment and Criticism
- understand and communicate the natural relationship between dance and human experience (QCC) (FAAD_D2005-14)
- observe, analyze, critique, and discuss dance performances from a historical/cultural perspective (QCC) (FAAD_D2005-15)

E - Dance/Movement Science
- study the human body and its specific structures and functions as it pertains to the mechanics of human motion (QCC) (FAAD_E2005-16)
- incorporate various technological resources into a dance context (QCC) (FAAD_E2005-17)
- integrate dance with other arts, sciences, and humanities (QCC) (FAAD_E2005-18)

DANCE COMPOSITION

A - Terminology
- define and use common choreographic terminology (QCC) (FADC_A2005-1)

B - Theory and Practice
- explore basic lighting and costuming techniques and principles (QCC) (FADC_B2005-2)
- create and lead a comprehensive dance warm-up in more than one dance form (QCC) (FADC_B2005-3)
- create an original choreographic work with concentration on all isolated choreographic elements as they relate to the intent and motivations of the choreographer (QCC, CE) (FADC_B2005-4)

C - Criticism and Analysis
- analyze, critique, and evaluate choreographic works of self and others (QCC) (FADC_C2005-5)

INTERMEDIATE DANCE

A - Technical and Movement Skills
- expand the use of dance terminology through physical, written, and oral expression (QCC) (FAMD_A2005-1)
- create a sound component to a dance warm-up (QCC) (FAMD_A2005-2)
- demonstrate various dance techniques at an intermediate level of proficiency (QCC) (FAMD_A2005-3)

B - Creative Expression, Choreography, and Performance
- explore and apply basic choreographic principles including concepts and phrases (QCC) (FAMD_B2005-4)
- utilize dance techniques and performance skills in public performance (QCC) (FAMD_B2005-5)
- combine various elements to compose movement phrases individually and collaboratively (QCC) (FAMD_B2005-6)
- explore improvisation through experimentation as a choreographic tool (QCC) (FAMD_B2005-7)

C - Cultural and Historical Context
- exhibit knowledge of the history of various dance forms and its prominent historical figures (QCC) (FAMD_C2005-8)
- identify various dance forms, choreographic styles, and dance styles specific to various cultures (QCC, CE) (FAMD_C2005-9)
- identify and critique classical dance works in historical/cultural perspective (QCC) (FAMD_C2005-10)
D - Aesthetic Judgment and Criticism
• recognize how design, shape, and mood affect choreography (QCC) (FAMD_D2005-11)
• analyze dance and develop an aesthetic judgment (QCC) (FAMD_D2005-12)

E - Dance/Movement Science
• follow guidelines for maintenance of physical health and strength to facilitate appropriate technical training (QCC, CE) (FAMD_E2005-13)
• identify systems of the human body and their specific structures and functions (QCC) (FAMD_E2005-14)
• discuss vocational and avocational opportunities in dance (QCC, CE) (FAMD_E2005-15)
• compare and contrast health issues and benefits related to dance (QCC, CE) (FAMD_E2005-16)

INTRODUCTION TO DANCE

A - Technical and Movement Skills
• define basic terminology of dance/movement (QCC) (FAID_A2005-1)
• exhibit positive work habits and self-discipline in the study of dance (QCC, CE) (FAID_A2005-2)
• employ fundamental techniques of various dance forms (ballet, jazz, modern) (QCC) (FAID_A2005-3)
• demonstrate and explain the importance and basis of a dance warm-up (QCC) (FAID_A2005-4)

B - Creative Expression, Choreography, and Performance
• perform and respond to feelings, images, and thoughts through dance (QCC) (FAID_B2005-5)
• utilize technique and performance skills in public performance (QCC) (FAID_B2005-6)
• identify basic choreographic principles including basic choreographic concepts and phrases (QCC) (FAID_B2005-7)
• combine various dance elements to compose a short movement sequence (QCC, CE) (FAID_B2005-8)

C - Cultural and Historical Context
• explore origins and history of various dance forms (QCC) (FAID_C2005-9)
• identify major dance innovators and their contributions throughout history (QCC) (FAID_C2005-10)
• exhibit an understanding of the significance of dance in our culture and in other cultures (QCC, CE) (FAID_C2005-11)

D - Aesthetic Judgment and Criticism
• analyze and evaluate dance (QCC) (FAID_D2005-12)

E - Dance/Movement Science
• identify and discuss health issues important to dance training (QCC, CE) (FAID_E2005-13)
• demonstrate an understanding of muscular strength as an aid to injury prevention (QCC, CE) (FAID_E2005-14)
• understand the human body is composed of systems with specific structures and functions (QCC) (FAID_E2005-15)
• explore avocational and vocational possibilities of dance (QCC, CE) (FAID_E2005-16)

THEATRE DANCE

A - Technical and Movement Skills
• discuss the importance and basis of a dance warm-up (QCC) (FATD_A2005-1)
• explore basic movement theory (QCC) (FATD_A2005-2)
• explore and demonstrate skills in various ballroom and social dance forms (QCC) (FATD_A2005-3)
• perform social and ballroom dance forms in a public performance (QCC) (FATD_A2005-4)
B - Cultural and Historical Context
- explore origins and history of various social dance forms (QCC) (FATD_B2005-5)
- identify major dance innovators in the fields of social and musical theater dance (QCC) (FATD_B2005-6)
- discuss the importance of dance in our culture and in other cultures (QCC, CE) (FATD_B2005-7)

C - Dance/Movement Science
- discuss healthy lifestyles and the importance of good health to dance training (QCC, CE) (FATD_C2005-8)
- study the human body and its specific structures and functions as it pertains to the mechanics of human motion (QCC) (FATD_C2005-9)
- develop muscular strength to aid in dance and injury prevention (QCC, CE) (FATD_C2005-10)

ADVANCED GUITAR

A - Individual Performance
- utilize correct posture for the acoustic guitar (QCC) (FAAG_A2010-1)
- sight-read all notes in first position, including sharps and flats with rhythms of quarter notes, half notes, whole notes, dotted half notes, sixteenth notes, eighth notes, dotted rhythms, and relative rest values (QCC) (FAAG_A2010-2)
- read rhythms in more advanced time signatures (QCC) (FAAG_A2010-3)
- employ correct hand and finger position in first through fifth positions (QCC) (FAAG_A2010-4)
- read and perform notes in first through fifth positions (QCC) (FAAG_A2010-5)
- perform class repertoire to expected, advanced competency level (QCC) (FAAG_A2010-6)
- perform scales using the three basic finger patterns from memory (QCC) (FAAG_A2010-7)
- perform melodies with more advanced phrasing, dynamics, and articulation (QCC) (FAAG_A2010-8)
- perform advanced jazz/pop chords (QCC) (FAAG_A2010-9)
- perform diminished chords (QCC) (FAAG_A2010-10)
- perform “cover” songs of various artists individually (QCC) (FAAG_A2010-11)
- create and perform original songs (QCC) (FAAG_A2010-12)
- tune instrument from a given low E and then using fourth and fifth frets (QCC) (FAAG_A2010-13)

B - Group Performance
- perform class repertoire to expected, advanced competency level in both small and large ensembles (QCC) (FAAG_B2010-14)
- improvise a melody while others accompany with chords (QCC) (FAAG_B2010-15)
- create and perform original progressions and songs with other players (QCC) (FAAG_B2010-16)
- demonstrate awareness of individual role within ensemble relating to balance, blend, dynamics, and phrasing (QCC) (FAAG_B2010-17)
- play expressively as a group member (QCC) (FAAG_B2010-18)
- demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC) (FAAG_B2010-19)

C - Cultural and Historical Context
- perform music from different genres such as rock, blues, jazz, classical, latin, mariachi, punk, reggae, folk, bluegrass, to expected, advanced competency level (QCC) (FAAG_C2010-20)
- use print and non-print media to locate information about music and musicians (QCC) (FAAG_C2010-21)
- explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to guitar music (QCC) (FAAG_C2010-22)
- explain the evolution and history of the guitar and guitar music (QCC) (FAAG_C2010-23)
- identify music related careers (QCC) (FAAG_C2010-24)
**D - Music Theory**
- demonstrate use of music technology in music classroom (QCC) (FAAG_C2010-25)
- demonstrate knowledge of formal structure of class repertoire (QCC) (FAAG_D2010-26)
- identify all key signatures, major and minor (QCC) (FAAG_D2010-27)
- recognize chordal structure (major, minor, augmented, and diminished) and relate it to key and scale (QCC) (FAAG_D2010-28)
- construct major, minor, augmented, and diminished triads (QCC) (FAAG_D2010-29)
- construct intervals from m2 to octave (QCC) (FAAG_D2010-30)
- construct 7 chords (QCC) (FAAG_D2010-31)
- construct 9 and 13 chords (QCC) (FAAG_D2010-32)
- use musical vocabulary necessary to study, rehearse, and perform advanced guitar music (QCC) (FAAG_D2010-33)
- construct major and minor scales (QCC) (FAAG_D2010-34)
- create, arrange, notate, and perform melody for chosen instrument(s) ensemble (QCC) (FAAG_D2010-35)

**E - Instrument Care**
- demonstrate proper care and maintenance of guitar (QCC) (FAAG_E2010-36)
- demonstrate ability to change guitar string (QCC) (FAAG_E2010-37)

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**ADVANCED MUSIC TECHNOLOGY**

**A - Computer Basics**
- define what a computer is related to musical technology (FAAT_A2005-1)
- explain and summarize the history of computers in the context of music (FAAT_A2005-2)
- apply relevant computer-related terms associated with musical technology (FAAT_A2005-3)
- recognize ethical and legal issues related to the use of computers (FAAT_A2005-4)
- practice proper use and care of computer equipment and media (FAAT_A2005-5)

**B - MIDI Applications**
- understand concepts of MIDI, MIDI-channels, and MIDI files (FAAT_B2005-6)
- employ basic terms, such as multi-timbral, polyphony, and general MIDI, as they apply to the electronic keyboard (synthesizer) (FAAT_B2005-7)
- import and export MIDI files from sequencing and notation software (FAAT_B2005-8)
- apply program sounds other than general MIDI in sequences (FAAT_B2005-9)
- employ the use of various drum kits other than the standard general MIDI drum kit (FAAT_B2005-10)

**C - MIDI Sequencing Software**
- understand the basic operation of sequencing software (FAAT_C2005-11)
- apply various editing features using sequencing software (FAAT_C2005-12)
- create a multi-track sequence utilizing different channels or sounds (FAAT_C2005-13)
- understand and apply concepts of quantizing drum and other instrument tracks (FAAT_C2005-14)
- apply various editing features, such as changing tempo, velocity, and pitch (FAAT_C2005-15)
- modify a multi-track sequence utilizing various tools in the step editor (FAAT_C2005-16)

**D - Intelligent Accompaniment Software**
- understand the basic operation of intelligent accompaniment software (FAAT_D2005-17)
- apply various editing features, such as changing styles and tempos (FAAT_D2005-18)
- create a musical composition using intelligent accompaniment software (FAAT_D2005-19)
E - Notation Software
- understand the basic operation of notation software (FAAT_E2005-20)
- apply various editing features, such as changing clefs, time, and key signature (FAAT_E2005-21)
- apply page layout features including measure spacing, systems, per page, and staff size (FAAT_E2005-22)
- create a short composition using a single staff (CE) (FAAT_E2005-23)

F - Music Composition
- create a multi-track sequence of background music for a specific setting, such as movie/TV score and computer game (CE) (FAAT_F2005-24)
- analyze formal elements of a variety of musical examples (FAAT_F2005-25)
- create a multi-track sequence of musical form utilizing an introduction, main theme and ending (CE) (FAAT_F2005-26)
- understand and apply concepts of basic recording techniques (FAAT_F2005-27)
- apply track mixing techniques (FAAT_F2005-28)
- understand and apply editing functions of keyboard sounds (FAAT_F2005-29)
- create a multi-track sequence of background music and synchronize it to a video format (CE) (FAAT_F2005-30)
- select or create an appropriate rhythmic accompaniment for a specific melody (FAAT_F2005-31)
- expand understanding and use of compositional techniques including harmonization, orchestration and arranging (FAAT_F2005-32)

G - Music Industry
- identify careers associated with the musical industry (producer, engineer, manager) (CE) (FAAT_G2005-33)
- identify terms associated with the musical industry, such as digital/analog recording (FAAT_G2005-34)

BEGINNING GUITAR

A - Individual Performance
- utilize correct posture for the acoustic guitar (QCC) (FAGU_A2010-1)
- read, name, and play natural notes in first position with rhythms of quarter notes, half notes, quarter rests, and half rests (QCC) (FAGU_A2010-2)
- read and perform basic rhythms in 2/4, 3/4, and 4/4 time signatures (QCC) (FAGU_A2010-3)
- employ correct hand and finger position in first position (QCC) (FAGU_A2010-4)
- perform class repertoire to expected competency level (QCC) (FAGU_A2010-5)
- perform natural note scale in first position (QCC) (FAGU_A2010-6)
- perform chromatic scale in first position (QCC) (FAGU_A2010-7)
- perform basic blues scale in different positions (QCC) (FAGU_A2010-8)
- read and perform basic rhythm guitar using D, D7, dm, A, A7, am, E, E7, em, G, G7, B7, C, and F chords in first position (QCC) (FAGU_A2010-9)
- perform basic D, A, E, G, C, em, and am progressions (QCC) (FAGU_A2010-10)
- perform 12-bar blues in several keys (QCC) (FAGU_A2010-11)
- read and perform power chords (QCC) (FAGU_A2010-12)
- improvise a melody from a given range of pitches (QCC) (FAGU_A2010-13)

B - Group Performance
- perform class repertoire to expected competency level in both small and large ensembles (QCC) (FAGU_B2010-14)
- improvise on blues scale with chordal accompaniment (QCC) (FAGU_B2010-15)
- demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC) (FAGU_B2010-16)
C - Cultural and Historical Context
• perform music from rock, blues, and other genres to expected, beginning competency level (QCC) (FAGU_C2010-17)
• use print and non-print media to locate information about music and musicians (QCC) (FAGU_C2010-18)
• explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to guitar music (QCC) (FAGU_C2010-19)
• explain the evolution and history of the guitar and guitar music (QCC) (FAGU_C2010-20)
• demonstrate knowledge of different kinds of guitars (acoustic, classical, electric, bass, etc.) (QCC) (FAGU_C2010-21)
• identify music related careers (QCC) (FAGU_C2010-22)
• demonstrate basic use of music technology in music classroom (QCC) (FAGU_C2010-23)

D - Music Theory
• demonstrate knowledge of verse, chorus, bridge, intro, and outro structure in songs (QCC) (FAGU_D2010-24)
• demonstrate knowledge of formal structure of class repertoire (QCC) (FAGU_D2010-25)
• use musical vocabulary necessary to study, rehearse, and perform beginning guitar music (QCC) (FAGU_D2010-26)
• identify musical symbols and their meanings (QCC) (FAGU_D2010-27)

E - Instrument Care
• demonstrate proper care and maintenance of guitar (QCC) (FAGU_E2010-28)

BEGINNING PIANO KEYBOARD TECHNIQUES

A - Creating, Performing, Producing
• project correct positioning and posture for the instrument (QCC) (FABK_A2005-1)
• employ correct fingering techniques and hand and arm motion (QCC) (FABK_A2005-2)
• perform class repertoire to expected competency level (QCC) (FABK_A2005-3)
• perform individually and as a member of an ensemble (QCC) (FABK_A2005-4)
• perform appropriate scales and arpeggios from memory at a metronome marking and number of octaves appropriate to level (QCC) (FABK_A2005-5)
• perform melodies with appropriate phrasing and articulation (QCC) (FABK_A2005-6)
• improvise a melody from a given range of pitches, rhythms, and chords/chord progressions (QCC) (FABK_A2005-7)
• create, notate, and perform an original melody for piano (QCC) (FABK_A2005-8)
• create, notate, and perform an accompaniment given a melody and chordal structure (FABK_A2005-9)
• describe how technology is used to transcribe, edit, and compose music on a computer station (QCC) (FABK_A2005-10)

B - Music Theory
• count and move to develop rhythm skills (FABK_B2005-11)
• use appropriate musical vocabulary to study, rehearse, and perform (QCC) (FABK_B2005-12)
• explore symbols and traditional terms referring to dynamics, tempo, and articulation (FABK_B2005-13)
• explore directional symbols and terms, such as repeat signs, first and second endings, da capo, dal segno, and coda (FABK_B2005-14)
• sight-read at expected competency level (QCC) (FABK_B2005-15)
• recognize the formal structure of class repertoire (QCC) (FABK_B2005-16)
• recognize the tonality of music from the notation (QCC) (FABK_B2005-17)
• recognize chordal structure (M, m, A, d) and relate it to key and scale (QCC) (FABK_B2005-18)
• use print and non-print media to locate definitions of musical terms and information about music and musicians (QCC) (FABK_B2005-19)
C - Cultural and Historical Context
- discuss composers of selected repertoire and the historical/cultural context of works being performed (QCC) (FABK_C2005-20)
- explain the evolution and history of the piano (QCC) (FABK_C2005-21)
- identify music-related careers (QCC) (FABK_C2005-22)

INTERMEDIATE GUITAR

A - Individual Performance
- utilize correct posture for the acoustic guitar (QCC) (FAIG_A2010-1)
- sight-read natural notes in first position with rhythms of quarter notes, half notes, whole notes, dotted half notes, and the relative rest values (QCC) (FAIG_A2010-2)
- read, name, and play notes with sharps and flats (QCC) (FAIG_A2010-3)
- read and perform more complex rhythms in 2/4, 3/4, 4/4, 6/4, 3/8, and 6/8 time signatures (QCC) (FAIG_A2010-4)
- employ correct hand and finger position in first position (QCC) (FAIG_A2010-5)
- perform class repertoire to expected, intermediate competency level (QCC) (FAIG_A2010-6)
- perform more advanced melodies with basic dynamics and articulation (QCC) (FAIG_A2010-7)
- improvise a melody from a given range of pitches (QCC) (FAIG_A2010-8)
- create and perform original “licks,” progressions, and/or songs (QCC) (FAIG_A2010-9)
- expand knowledge of basic first position chords (QCC) (FAIG_A2010-10)
- explore different strumming patterns (QCC) (FAIG_A2010-11)
- read and perform barre chords (QCC) (FAIG_A2010-12)
- read and perform basic bass guitar (QCC) (FAIG_A2010-13)
- utilize correct hand and body positioning for the classical guitar (QCC) (FAIG_A2010-14)
- read and perform basic classical guitar arpeggios and tunes (QCC) (FAIG_A2010-15)
- tune instrument from a given low E and then using fourth and fifth frets (QCC) (FAIG_A2010-16)

B - Group Performance
- perform class repertoire to expected, intermediate competency level in both small and large ensembles (QCC) (FAIG_B2010-17)
- perform as a member of a melodic trio (3 individual parts) (QCC) (FAIG_B2010-18)
- perform as a member of a rhythm, melody, and bass trio (QCC) (FAIG_B2010-19)
- demonstrate awareness of individual role within ensemble relating to balance, blend, dynamics, and phrasing (QCC) (FAIG_B2010-20)
- demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC) (FAIG_B2010-21)

C - Cultural and Historical Context
- perform music from different genres such as rock, blues, jazz, classical, latin, mariachi, punk, reggae, folk, bluegrass, to expected, intermediate competency level (QCC) (FAIG_C2010-22)
- use print and non-print media to locate information about music and musicians (QCC) (FAIG_C2010-23)
- explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to guitar music (QCC) (FAIG_C2010-24)
- explain the evolution and history of the guitar and guitar music (QCC) (FAIG_C2010-25)
- demonstrate knowledge of different kinds of guitars (acoustic, classical, electric, bass, etc.) (QCC) (FAIG_C2010-26)
- identify music related careers (QCC) (FAIG_C2010-27)
- demonstrate basic use of music technology in music classroom (QCC) (FAIG_C2010-28)
**D - Music Theory**
- demonstrate knowledge of formal structure of class repertoire (QCC) (FAIG_D2010-29)
- use musical vocabulary necessary to study, rehearse, and perform beginning classical guitar music (QCC) (FAIG_D2010-30)
- use musical vocabulary necessary to study, rehearse, and perform intermediate acoustic guitar music (QCC) (FAIG_D2010-31)
- identify musical symbols and their meanings (QCC) (FAIG_D2010-32)
- demonstrate basic understanding of key signatures (QCC) (FAIG_D2010-33)

**E - Instrument Care**
- demonstrate proper care and maintenance of guitar (QCC) (FAIG_E2010-34)
- demonstrate ability to change guitar string (QCC) (FAIG_E2010-35)

**INTERMEDIATE MUSIC TECHNOLOGY**

**A - Computer Basics**
- define what a computer is related to musical technology (FAMT_A2005-1)
- explain and summarize the history of computers in the context of music (FAMT_A2005-2)
- define relevant computer-related terms associated with musical technology (FAMT_A2005-3)
- recognize ethical and legal issues related to the use of computers (CE) (FAMT_A2005-4)
- practice proper use and care of computer equipment and media (CE) (FAMT_A2005-5)

**B - MIDI Applications**
- understand concepts of MIDI, MIDI-channels, and MIDI files (FAMT_B2005-6)
- employ basic terms, such as multi-timbral, polyphony, and general MIDI, as they apply to the electronic keyboard (synthesizer) (FAMT_B2005-7)
- import and export MIDI files from sequencing and notation software (FAMT_B2005-8)
- apply program sounds other than general MIDI in sequences (FAMT_B2005-9)
- employ the use of various drum kits other than the standard general MIDI drum kit (FAMT_B2005-10)

**C - MIDI Sequencing Software**
- understand the basic operation of sequencing software (FAMT_C2005-11)
- apply various editing features using sequencing software (FAMT_C2005-12)
- create a multi-track sequence utilizing different channels or sounds (CE) (FAMT_C2005-13)
- understand and apply concepts of quantizing drum and other instrument tracks (FAMT_C2005-14)
- apply various editing features, such as changing tempo, velocity, and pitch (FAMT_C2005-15)
- modify a multi-track sequence utilizing various tools in the step editor (FAMT_C2005-16)

**D - Intelligent Software**
- understand the basic operation of intelligent accompaniment software (FAMT_D2005-17)
- apply various editing features, such as changing styles and tempos (FAMT_D2005-18)
- create a musical composition using intelligent accompaniment software (FAMT_D2005-19)

**E - Notation Software**
- understand the basic operation of notation software (FAMT_E2005-20)
- apply various editing features, such as changing clefs, time, and key signature (FAMT_E2005-21)
- apply page layout features, such as measures per system and systems per page (FAMT_E2005-22)
- create a short composition using a single staff (CE) (FAMT_E2005-23)
F - Music Composition
- create a multi-track sequence of background music for a specific setting, such as movie/TV score and computer game (CE) (FAMT_F2005-24)
- analyze formal elements of a variety of musical examples (FAMT_F2005-25)
- create a multi-track sequence of musical form utilizing an introduction, main theme, and ending (CE) (FAMT_F2005-26)

INTRODUCTION TO MUSIC TECHNOLOGY

A - Computer Basics
- define what a computer is related to musical technology (FAIM_A2005-1)
- explain and summarize the history of computers in the context of music (FAIM_A2005-2)
- define relevant computer-related terms associated with musical technology (FAIM_A2005-3)
- recognize ethical and legal issues related to the use of computers (FAIM_A2005-4)
- practice proper use and care of computer equipment and media (CE) (FAIM_A2005-5)

B - MIDI Applications
- understand concepts of MIDI, MIDI-channels, and MIDI files (FAIM_B2005-6)
- employ basic terms, such as multi-timbral, polyphony, and general MIDI, as they apply to the electronic keyboard (synthesizer) (FAIM_B2005-7)

C - MIDI Sequencing Software
- understand the basic operation of sequencing software (FAIM_C2005-8)
- apply various editing features using sequencing software (FAIM_C2005-9)
- create a multi-track sequence utilizing different channels or sounds (CE) (FAIM_C2005-10)

D - Intelligent Accompaniment Software
- understand the basic operation of intelligent accompaniment software (FAIM_D2005-11)
- apply various editing features, such as changing styles and tempos (FAIM_D2005-12)
- create a musical composition using intelligent accompaniment software (FAIM_D2005-13)

E - Notation Software
- understand the basic operation of notation software (FAIM_E2005-14)
- apply various editing features, such as changing clefs, time, and key signature (FAIM_E2005-15)
- apply page layout features including measure spacing, systems, per page, and staff size (FAIM_E2005-16)
- create a short composition using a single staff (FAIM_E2005-17)

MUSIC HISTORY

A - Elements of Music
- recognize traditional pitch notation, including line and space names on the staff, in treble and bass clefs (FAMH_A2005-1)
- explore current rhythmic notation used in traditional and 20th Century music, including notes, rests, meter signatures, and unmetered scores (FAMH_A2005-2)
- explore key signatures, major, minor, modal, and atonal music (FAMH_A2005-3)
- explore phrase shape and movement of melodic line (FAMH_A2005-4)
- identify common tempo markings (FAMH_A2005-5)
A - Elements of Music (continued)
- explore use of harmony in music, including consonance and dissonance, intervals, chord structure, scales, modes, atonality, and serialism (FAMH_A2005-6)
- explore dynamics in various musical styles (FAMH_A2005-7)
- explore texture in various musical styles, including monophony, polyphony, homophony, and counterpoint (FAMH_A2005-8)
- explore use of cadences as resting and finalizing sections of harmonic structure and their use as transitions into new tonalities (FAMH_A2005-9)
- follow written scores of music of various styles and genres (FAMH_A2005-10)
- explore development of major music forms, including keyboard, vocal, and orchestral (FAMH_A2005-11)

B - Cultural and Historical Context
- explore the history of rhythm and pitch notation (FAMH_B2005-12)
- examine development of orchestral and keyboard instruments and demonstrate familiarity with the most common instruments (FAMH_B2005-13)
- identify common voice classifications (FAMH_B2005-14)
- identify instrumental and vocal ensemble groupings commonly used in music (FAMH_B2005-15)
- name and provide dates for major historical periods related to music (FAMH_B2005-16)
- generalize characteristics of style for each major musical period (FAMH_B2005-17)
- analyze major composers' styles and periods during which they wrote (FAMH_B2005-18)
- explore lives of major composers (FAMH_B2005-19)
- analyze use of instruments and voices in each major period, including size of groups (FAMH_B2005-20)
- describe prevalence and function of sacred and secular music in each major period (FAMH_B2005-21)
- compare each major musical period with other arts, curriculum areas, and technology (FAMH_B2005-22)
- describe the impact of social, political, and cultural conditions on the arts of various periods (CE) (FAMH_B2005-23)
- use print and non-print media to locate information about music and musicians (FAMH_B2005-24)

C - Listening
- listen with increasing discrimination and concentration (FAMH_C2005-25)
- identify common vocal ranges and instruments by timbre (FAMH_C2005-26)
- identify major historical periods from characteristic listening examples (FAMH_C2005-27)
- describe rhythmic, melodic, and harmonic composition in music examples and their effect on musical style and form (FAMH_C2005-28)
- identify common musical forms (FAMH_C2005-29)
- explore the influence of traditional music on the music of today (FAMH_C2005-30)
- identify music of other cultures (CE) (FAMH_C2005-31)
- explore nontraditional music forms (FAMH_C2005-32)
- demonstrate appropriate audience etiquette (CE) (FAMH_C2005-33)
- analyze the performance skill of performers (FAMH_C2005-34)
- analyze aesthetic properties of selected musical performances (FAMH_C2005-35)

MUSIC THEORY

A - Analysis and Composition
- identify and use major and minor key signatures (QCC) (FAMY_A2005-1)
- identify and use treble, bass, and c clefs (QCC) (FAMY_A2005-2)
- write conventional rhythmic and metric notations (FAMY_A2005-3)
A - Analysis and Composition (continued)
- transpose simple melodic lines in all clefs (QCC) (FAMY_A2005-4)
- define musical terms relating to harmonic function, cadence, and phrase structure (FAMY_A2005-5)
- interpret figured bass symbols and Roman numerals in four-part harmony (FAMY_A2005-6)
- harmonize simple melodies (FAMY_A2005-7)
- employ tempo and dynamic terms in composition (FAMY_A2005-8)
- analyze simple harmonic progressions using Roman numerals (QCC) (FAMY_A2005-9)
- identify authentic, plagal, and half cadences (FAMY_A2005-10)
- identify and classify nonharmonic tones (FAMY_A2005-11)
- explore pitch, rhythmic, and metric organization (FAMY_A2005-12)
- identify a variety of musical textures (FAMY_A2005-13)
- create short musical compositions in a variety of forms (QCC) (FAMY_A2005-14)
- use instrumental and vocal media in arrangements and compositions (QCC) (FAMY_A2005-15)
- create accompaniments for existing melodies (QCC) (FAMY_A2005-16)
- perform, analyze, and evaluate compositions written in class (QCC) (FAMY_A2005-17)

B - Listening and Performing
- demonstrate melodic and harmonic dictation (QCC) (FAMY_B2005-18)
- identify authentic, plagal, and half cadences aurally (FAMY_B2005-19)
- detect errors in pitch and rhythm (FAMY_B2005-20)
- identify musical processes and materials in the context of musical literature (QCC) (FAMY_B2005-21)
- sing major, minor, and chromatic scales (FAMY_B2005-22)
- sing major and minor arpeggios (FAMY_B2005-23)
- sing major, minor, perfect, diminished, and augmented intervals (FAMY_B2005-24)
- sight-read rhythms in simple and compound meters (QCC) (FAMY_B2005-25)
- sight-read simple melodic and harmonic lines (QCC) (FAMY_B2005-26)
- explore vocal use of nonharmonic tones (FAMY_B2005-27)
- play selected major and minor scales at keyboard with correct fingering (FAMY_B2005-28)

BEGINNING ORCHESTRA

A - Individual Performance Skills
- demonstrate correct posture, left hand position, and finger placement (QCC) (IMBO_A2005-1)
- develop flexibility of right arm and wrist (QCC) (IMBO_A2005-2)
- hold bow correctly (QCC) (IMBO_A2005-3)
- produce good tone playing arco and pizzicato (QCC) (IMBO_A2005-4)
- use appropriate part of the bow or whole bow, as necessary (QCC) (IMBO_A2005-5)
- articulate various bowing styles (staccato, spiccato, martele, and legato) (QCC) (IMBO_A2005-6)
- execute increasingly difficult finger and bowing patterns (QCC) (IMBO_A2005-7)
- perform mechanics of tuning (QCC) (IMBO_A2005-8)
- employ harmonics in tuning cello and bass (QCC) (IMBO_A2005-9)
- perform steady beat (IMBO_A2005-10)
- read and perform rhythms containing whole notes, half notes, quarter notes, eighth notes, dotted half notes, and their corresponding rests (QCC) (IMBO_A2005-11)
- read and play melodies and exercises in 2/4, 3/4, 4/4, and C time signatures (QCC) (IMBO_A2005-12)
- perform simple syncopated rhythms (QCC) (IMBO_A2005-13)
A - Individual Performance Skills (continued)

- employ correct tempo when performing (QCC) (IMBO_A2005-14)
- play C, D, and F major scales (one octave) and G major scale (two octaves) (violins) (QCC) (IMBO_A2005-15)
- play G and F major scales (one octave) and C and D major scale (two octaves) (violas and cellos) (QCC) (IMBO_A2005-16)
- play C, D, G, and F major scales (one octave) (string basses) (QCC) (IMBO_A2005-17)
- read and play melodies and exercises written in C, D, G, and F major (QCC) (IMBO_A2005-18)
- imitate rhythms and short, simple melodies (QCC) (IMBO_A2005-19)
- demonstrate correct left and right hand pizzicato (QCC) (IMBO_A2005-20)
- respond correctly to dynamic markings and their symbols, including f (forte), mf (mezzo forte), ff (fortissimo), p (piano), mp (mezzo piano) and pp (pianissimo) (QCC) (IMBO_A2005-21)
- identify common music symbols, including the repeat sign, D.C., D.S., 1st and 2nd ending signs, down bow, and up bow signs (QCC) (IMBO_A2005-22)
- define largo, andante, and allegro (QCC) (IMBO_A2005-23)
- slur two or more pitches in one bow stroke (QCC) (IMBO_A2005-24)
- play detached slur (QCC) (IMBO_A2005-25)
- relate appropriate use of bow, bow speed, pressure, and distance from bridge with various dynamics and tempo levels (QCC) (IMBO_A2005-26)
- sight-read one grade below average performance level (QCC) (IMBO_A2005-27)

B - Ensemble Performance Skills

- demonstrate appropriate concert etiquette at live concerts (QCC, CE) (IMBO_B2005-28)
- perform publicly at least twice per year at expected competency level (QCC) (IMBO_B2005-29)
- develop competencies related to individual responsibility to group as it pertains to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (CE) (IMBO_B2005-30)
- maintain ensemble in various two-part, unison, and polyphonic textures (QCC) (IMBO_B2005-31)
- exhibit awareness of individual role within the ensemble relating to balance, blend, dynamics, and phrasing (QCC) (IMBO_B2005-32)
- apply sensitivity, tone quality, blend, balance, and intonation in unison, duet, and ensemble playing (QCC) (IMBO_B2005-33)
- exhibit awareness of performance practice associated with various forms and styles (QCC) (IMBO_B2005-34)
- critique music performed by ensemble and suggest improvements (QCC, CE) (IMBO_B2005-35)

C - Music Theory

- identify notes on staff and ledger lines of respective clef (IMBO_C2005-36)
- understand concept of whole and half steps relating to finger placement (QCC) (IMBO_C2005-37)
- construct major scales based on whole and half steps (IMBO_C2005-38)
- identify key signatures for C, D, G, and F major (QCC) (IMBO_C2005-39)
- increase skill in reading rhythms, including sixteenth notes in groups of two or four, dotted quarter and eighth note combinations, quarter and eighth note triplets, and equivalent rests in 2/4, 3/4, 4/4, and ¢ time (QCC) (IMBO_C2005-40)
- create, notate, and perform an original melody for instrument studied (QCC, CE) (IMBO_C2005-41)

D - Cultural and Historical Context

- identify and compare performance styles of music learned in class (QCC) (IMBO_D2005-42)
- explore evolution and history of orchestral string instruments (QCC) (IMBO_D2005-43)
- describe and analyze a variety of music-related careers (QCC, CE) (IMBO_D2005-44)
- explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to orchestral music (QCC, CE) (IMBO_D2005-45)
- locate information related to musical concepts, composers, and performers using various print and electronic sources (QCC) (IMBO_D2005-46)
E - Instrument Care
• identify parts of instrument and bow (IMBO_E2005-47)
• handle instrument properly (QCC) (IMBO_E2005-48)
• demonstrate proper care and maintenance of instrument (CE) (IMBO_E2005-49)

CHAMBER ENSEMBLE

A - Individual Performance Skills
• perform three octave scales/arpeggios at expected competency level (bass: 2 octaves) (IMCE_A2005-1)
• employ differing speeds and widths in vibrato (QCC) (IMCE_A2005-2)
• demonstrate proper shifting technique appropriate for selected repertoire (QCC) (IMCE_A2005-3)
• demonstrate appropriate bowing styles at the expected competency level (QCC) (IMCE_A2005-4)
• demonstrate acceptable intonation (QCC) (IMCE_A2005-5)
• perform in major and minor key signatures (QCC) (IMCE_A2005-6)
• apply changes in tone quality through bow speed, weight, and placement (QCC) (IMCE_A2005-7)
• exemplify phrase and melody through performance (QCC) (IMCE_A2005-8)
• demonstrate characteristic movement in playing (QCC) (IMCE_A2005-9)
• perform interpretations or improvisations of music repertoire (QCC) (IMCE_A2005-10)
• demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC) (IMCE_A2005-11)
• critique music performed by ensemble (QCC) (IMCE_A2005-12)
• recognize harmonic structure and demonstrate awareness of its role in performance (QCC) (IMCE_A2005-13)
• demonstrate effective musical leadership skills at expected competency level (QCC) (IMCE_A2005-14)
• demonstrate note reading skills, when appropriate, in treble clef (viola/cello) and in tenor clef (cello/bass) (QCC) (IMCE_A2005-15)

B - Ensemble Performance Skills
• demonstrate awareness of individual role within ensemble relating to balance, blend, dynamics, and phrasing (QCC) (IMCE_B2005-16)
• perform chamber music in public (QCC) (IMCE_B2005-17)
• play expressively as a group member (QCC) (IMCE_B2005-18)

C - Music Theory
• employ symbols, vocabulary, and abbreviations related to the study of orchestral music (QCC) (IMCE_C2005-19)
• identify aurally all intervals from unisons to octaves (QCC) (IMCE_C2005-20)
• demonstrate appropriate understanding of form in selected repertoire (QCC) (IMCE_C2005-21)
• identify all key signatures, major, and minor (QCC) (IMCE_C2005-22)
• construct major and minor scales (IMCE_C2005-23)
• create, arrange, notate, and perform melodies for chosen instrument(s) or ensemble (QCC) (IMCE_C2005-24)
• demonstrate use of music technology in classroom (QCC) (IMCE_C2005-25)

D - Cultural and Historical Context
• identify relationship between composer, period, and repertoire (QCC) (IMCE_D2005-26)
• identify and compare music history with major historical events and social trends (QCC) (IMCE_D2005-27)
• explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to orchestral music (QCC) (IMCE_D2005-28)
D - Cultural and Historical Context (continued)
- locate information related to music concepts, composers, and performers using various print and electronic sources (QCC) (IMCE_D2005-29)
- describe and analyze a variety of music-related careers (IMCE_D2005-30)

E - Instrument Care
- demonstrate proper care and maintenance of orchestral instrument(s) (IMCE_E2005-31)

CONCERT ORCHESTRA

A - Individual Performance Skills
- demonstrate two or three octaves/arpeggios at the expected competency level (bass: 2 octaves) (QCC) (IMCO_A2005-1)
- demonstrate use of characteristic vibrato (QCC) (IMCO_A2005-2)
- employ proper shifting technique appropriate for selected repertoire (QCC) (IMCO_A2005-3)
- demonstrate appropriate bowing styles at expected competency level (QCC) (IMCO_A2005-4)
- demonstrate acceptable intonation (QCC) (IMCO_A2005-5)
- perform in major and minor key signatures (QCC) (IMCO_A2005-6)
- apply changes in tone quality through bow speed, weight, and placement (QCC) (IMCO_A2005-7)
- exemplify phrase and melody through performance (QCC) (IMCO_A2005-8)
- demonstrate characteristic movement in playing (QCC) (IMCO_A2005-9)
- perform interpretation or improvisations of music repertoire (QCC) (IMCO_A2005-10)
- demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC, CE) (IMCO_A2005-11)
- critique music performed by ensemble (QCC) (IMCO_A2005-12)
- demonstrate effective musical leadership skills at expected competency level (QCC) (IMCO_A2005-13)
- tune instrument correctly (QCC) (IMCO_A2005-14)
- demonstrate correct posture and playing position for chosen instrument (QCC) (IMCO_A2005-15)
- demonstrate pizzicato, bowing, and left hand techniques appropriate to chosen instrument (QCC) (IMCO_A2005-16)

B - Ensemble Performance Skills
- demonstrate awareness of individual role within ensemble relating to balance, blend, dynamics, and phrasing (QCC) (IMCO_B2005-17)
- perform in concert varied repertoire of music literature equivalent to GMEA difficulty II/III/IV (QCC) (IMCO_B2005-18)
- play expressively as a group member (QCC) (IMCO_B2005-19)
- sight-read music equivalent to GMEA difficulty II/III/IV (QCC) (IMCO_B2005-20)

C - Music Theory
- employ symbols, vocabulary, and abbreviations related to orchestral study (QCC) (IMCO_C2005-21)
- identify aurally whole steps, half steps, and fifths (QCC) (IMCO_C2005-22)
- demonstrate appropriate understanding of form in selected repertoire (QCC) (IMCO_C2005-23)
- identify key signatures appropriate to selected repertoire (QCC) (IMCO_C2005-24)
- construct major scales (QCC) (IMCO_C2005-25)
- create, arrange, notate, and perform simple melodies for instrument(s) or ensemble (QCC) (IMCO_C2005-26)
- demonstrate use of music technology in classroom (QCC) (IMCO_C2005-27)

D - Cultural and Historical Context
- identify relationship between composer, period, and repertoire (QCC) (IMCO_D2005-28)
- identify and compare music history with major historical events and social trends (QCC) (IMCO_D2005-29)
D - Cultural and Historical Context (continued)
• explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to orchestral music (QCC) (IMCO_D2005-30)
• locate information related to music concepts, composers, and performers using various print and electronic sources (QCC) (IMCO_D2005-31)

E - Instrument Care
• demonstrate proper care and maintenance of orchestral instrument(s) (IMCO_E2005-32)

PHILHARMONIC ORCHESTRA

A - Individual Performance Skills
• demonstrate three octave scales/arpeggios at expected competency level (bass: 2 octaves) (QCC) (IMPO_A2005-1)
• employ differing speeds and widths of vibrato (QCC) (IMPO_A2005-2)
• employ proper shifting technique for selected repertoire (QCC) (IMPO_A2005-3)
• demonstrate appropriate bowing styles at expected competency level (QCC) (IMPO_A2005-4)
• demonstrate acceptable intonation (QCC) (IMPO_A2005-5)
• perform in major and minor key signatures (QCC) (IMPO_A2005-6)
• apply changes in tone quality through bow speed, weight, and placement (QCC) (IMPO_A2005-7)
• exemplify phrase and melody through performance (QCC) (IMPO_A2005-8)
• demonstrate characteristic movement in playing (QCC) (IMPO_A2005-9)
• perform interpretations or improvisations of music repertoire (QCC) (IMPO_A2005-10)
• demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC, CE) (IMPO_A2005-11)
• critique music performed by ensemble (QCC) (IMPO_A2005-12)
• recognize harmonic structure and demonstrate awareness of its role in performance (QCC) (IMPO_A2005-13)
• demonstrate effective music leadership skills at expected competency level (QCC) (IMPO_A2005-14)
• demonstrate note reading skills, when appropriate, in treble clef (viola/cello) and in tenor clef (cello/bass) (QCC) (IMPO_A2005-15)

B - Ensemble Performance Skills
• demonstrate awareness of individual role within ensemble relating to balance, blend, dynamics, and phrasing (QCC) (IMPO_B2005-16)
• perform in concert varied repertoire of music literature equivalent to GMEA difficulty level IV/V/VI in public (QCC) (IMPO_B2005-17)
• play expressively as a group member (QCC) (IMPO_B2005-18)
• sight-read music equivalent to GMEA difficulty III/IV/V (QCC) (IMPO_B2005-19)

C - Music Theory
• employ symbols, vocabulary, and abbreviations related to the study of orchestral music (QCC) (IMPO_C2005-20)
• identify aurally all intervals from unisons to octaves (QCC) (IMPO_C2005-21)
• demonstrate appropriate understanding of form in selected repertoire (QCC) (IMPO_C2005-22)
• identify all key signatures, major and minor (QCC) (IMPO_C2005-23)
• construct major and minor scales (IMPO_C2005-24)
• create, arrange, notate, and perform melody for chosen instrument(s) or ensemble (QCC) (IMPO_C2005-25)
• demonstrate use of music technology in music classroom (QCC) (IMPO_C2005-26)
Fine Arts

D - Cultural and Historical Context
- identify and compare relationship between composer, period, and repertoire (QCC) (IMPO_D2005-27)
- identify and compare music history with major historical events and social trends (QCC) (IMPO_D2005-28)
- explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to orchestral music (QCC) (IMPO_D2005-29)
- locate information related to music concepts, composers, and performers using various print and electronic sources (QCC) (IMPO_D2005-30)
- describe and analyze a variety of music-related careers (IMPO_D2005-31)

E - Instrument Care
- demonstrate proper care and maintenance of orchestral instrument(s) (IMPO_E2005-32)

SYMPHONIC ORCHESTRA

A - Individual Performance Skills
- demonstrate three octave scales/arpeggios at the expected competency level (bass-2 octaves) (QCC) (IMSO_A2005-1)
- demonstrate use of characteristic vibrato (QCC) (IMSO_A2005-2)
- employ proper shifting technique appropriate for selected repertoire (QCC) (IMSO_A2005-3)
- demonstrate appropriate bowing styles at the expected competency level (QCC) (IMSO_A2005-4)
- demonstrate acceptable intonation (QCC) (IMSO_A2005-5)
- perform in major and minor key signatures (QCC) (IMSO_A2005-6)
- apply changes in tone quality through bow speed, weight, and placement (QCC) (IMSO_A2005-7)
- exemplify phrase and melody through performance (QCC) (IMSO_A2005-8)
- demonstrate characteristic movement in playing (QCC) (IMSO_A2005-9)
- perform interpretations or improvisations of music repertoire (QCC) (IMSO_A2005-10)
- demonstrate competencies in rehearsal and performance related to individual responsibility to group as pertaining to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC, CE) (IMSO_A2005-11)
- critique music performed by ensemble (QCC) (IMSO_A2005-12)
- demonstrate effective musical leadership skills at expected competency level (QCC) (IMSO_A2005-13)
- demonstrate competency in performance of mixed meters (IMSO_A2005-14)

B - Ensemble Performance Skills
- demonstrate awareness of individual role within the ensemble relating to balance, blend, dynamics, and phrasing (QCC) (IMSO_B2005-15)
- perform in concert a varied repertoire of music literature equivalent to GMEA difficulty level III/IV/V (QCC) (IMSO_B2005-16)
- play expressively as a group member (QCC) (IMSO_B2005-17)
- sight-read music equivalent to GMEA difficulty level II/III/IV (QCC) (IMSO_B2005-18)

C - Music Theory
- employ symbols, vocabulary, and abbreviations related to the orchestral music studied (QCC) (IMSO_C2005-19)
- identify aurally unisons, seconds, fourths, fifths, and octaves (QCC) (IMSO_C2005-20)
- demonstrate appropriate understanding of form in selected repertoire (QCC) (IMSO_C2005-21)
- identify key signatures appropriate to the selected repertoire (QCC) (IMSO_C2005-22)
- construct major and minor scales (IMSO_C2005-23)
- create, arrange, notate, and perform melody for chosen instrument(s) or ensemble (QCC) (IMSO_C2005-24)
- demonstrate use of music technology in classroom (QCC) (IMSO_C2005-25)
D - Cultural and Historical Context
- identify and compare relationship between composer, period, and repertoire (QCC) (IMSO_D2005-26)
- identify and compare music history with major historical events and social trends (QCC) (IMSO_D2005-27)
- explore music of composers and performers of various cultural and ethnic backgrounds and their contributions to orchestral music (QCC) (IMSO_D2005-28)
- locate information related to music concepts, composers, and performers using various print and electronic sources (QCC) (IMSO_D2005-29)
- describe and analyze a variety of music-related careers (IMSO_D2005-30)

E - Instrument Care
- demonstrate proper care and maintenance of orchestral instrument(s) (IMSO_E2005-31)

ACTING

A - Creation and Performance
- develop and apply range of emotional expressions to portray complex characters (QCC) (FAAC_A2005-1)
- use imagination, improvisation, and observation in complex character development (QCC) (FAAC_A2005-2)
- apply and synthesize movement and/or vocal techniques to create characters (QCC) (FAAC_A2005-3)
- use language to reveal and communicate text and subtext (QCC) (FAAC_A2005-4)
- demonstrate and apply disciplined work ethic in solo and collaborative work (QCC, CE) (FAAC_A2005-5)
- create solutions to dramatic problems through acting (QCC, CE) (FAAC_A2005-6)
- employ vocabulary related to acting (QCC, CE) (FAAC_A2005-7)
- synthesize other disciplines to support development of a role (QCC) (FAAC_A2005-8)

B - Perception and Analysis
- analyze and evaluate dramatic text as basis for performance (QCC) (FAAC_B2005-9)
- respond to theatre art as an effort to communicate, intensify, and interpret human experience (QCC) (FAAC_B2005-10)
- use available technology to research, document, enhance, or support development of a role (QCC) (FAAC_B2005-11)
- describe and analyze relationship of technical theatre and theatre management to acting (QCC) (FAAC_B2005-12)
- evaluate performance based on criteria established by group (QCC) (FAAC_B2005-13)

C - Cultural and Historical Context
- reflect upon personal and universal meanings in drama/theatre as they appear in literature studied (CE) (FAAC_C2005-14)
- analyze personal discipline, knowledge, and skills requisite for career preparation in theatre (QCC, CE) (FAAC_C2005-15)
- explore cultural and historical aspects of theatre heritage in solving theatrical problems (QCC, CE) (FAAC_C2005-16)

ADVANCED DRAMA

A - Creation and Performance
- employ and respond to sensory and emotional experiences to interpret role (QCC) (FAAA_A2005-1)
- apply movement techniques for characterization in scripted and non-scripted activities (QCC) (FAAA_A2005-2)
- interpret meaning and character through language (QCC) (FAAA_A2005-3)
- apply vocal techniques to development of characterization in improvised and scripted theatre (QCC) (FAAA_A2005-4)
- demonstrate responsibility in collaborating on all aspects of production (QCC, CE) (FAAA_A2005-5)
- create monologues, scenes, or short plays integrating content and form (QCC) (FAAA_A2005-6)
- expand usage of theatre terms and apply them to drama activities (QCC) (FAAA_A2005-7)
A - Creation and Performance (continued)
• survey the function of designers and create/execute one design element (QCC) (FAAA_A2005-8)
• use imagination, improvisation, and observation in complex character development (QCC) (FAAA_A2005-9)
• develop physical warm-up that includes relaxation, concentration, coordination, and flexibility (QCC) (FAAA_A2005-10)
• demonstrate ability to note and implement blocking and generate and follow appropriate blocking for character choices (QCC) (FAAA_A2005-11)

B - Perception and Analysis
• create resolutions to dramatic problems (QCC, CE) (FAAA_B2005-12)
• use skill of analysis in creating characters (QCC) (FAAA_B2005-13)
• evaluate performances of scenes and short plays (QCC) (FAAA_B2005-14)
• examine roles and responsibilities of theatre production staff (QCC) (FAAA_B2005-15)
• use technology and materials to research, document, enhance, or support any aspects of theatre production (QCC) (FAAA_B2005-16)

C - Cultural and Historical Context
• recognize and analyze personal and universal meanings in drama/theatre (QCC, CE) (FAAA_C2005-17)
• use knowledge of cultural and historical aspects of theatre heritage to enhance any aspect of theatre production (QCC, CE) (FAAA_C2005-18)
• analyze personal discipline, knowledge and skills requisite for a career in theatre (QCC, CE) (FAAA_C2005-19)

INTRODUCTION TO THEATRE
A - Creation and Performance
• select, apply, and develop sensory and emotional recall to develop character (QCC) (FAIT_A2005-1)
• use imagination, improvisation, and observation in development of character, environment, and situations (QCC) (FAIT_A2005-2)
• apply movement techniques for characterization in improvised and scripted activities (QCC) (FAIT_A2005-3)
• develop and apply vocal techniques for characterization in improvised and scripted activities (QCC) (FAIT_A2005-4)
• demonstrate responsibility, self-discipline, and effective collaboration in artistic activities (QCC) (FAIT_A2005-5)
• describe roles and responsibilities of theatre production staff (QCC) (FAIT_A2005-6)
• project motivations and intentions to other actors and the audience (FAIT_A2005-7)
• notate and implement blocking (QCC) (FAIT_A2005-8)
• design at least one simple technical element for at least one activity (QCC) (FAIT_A2005-9)

B - Perception and Analysis
• explore functions of designers in a theatre production (FAIT_B2005-10)
• analyze and evaluate live theatre (QCC) (FAIT_B2005-11)
• analyze and evaluate elements in dramatic literature (QCC) (FAIT_B2005-12)
• respond to theatre art as an effort to communicate, intensify, and interpret human experience as major means of cultural transmission (QCC) (FAIT_B2005-13)
• employ basic theatre vocabulary (QCC) (FAIT_B2005-14)

C - Cultural and Historical Context
• consider personal and universal meanings in drama/theatre as they appear in material studied (QCC, CE) (FAIT_C2005-15)
• describe and analyze selected occupations in theatre (QCC, CE) (FAIT_C2005-16)
• recognize relationships between theatre and other disciplines (QCC) (FAIT_C2005-17)
• survey the history of theatre in this and other societies (FAIT_C2005-18)
STAGECRAFT

A - Creation and Performance
• recognize the relationships within the production staff and work with others effectively and safely in technical productions (QCC, CE) (FAST_A2005-1)
• apply creative problem-solving to technical theatre (QCC, CE) (FAST_A2005-2)
• demonstrate knowledge of processes, techniques, and materials of technical theatre (QCC) (FAST_A2005-3)
• use imagination in designing and implementing technical theatre (QCC, CE) (FAST_A2005-4)
• communicate an understanding of technical theatre through application of vocabulary (QCC) (FAST_A2005-5)
• employ technology equipment and resources to enhance technical theatre production and design (QCC) (FAST_A2005-6)
• prepare a budget for producing, marketing, and maintaining a production (QCC) (FAST_A2005-7)
• recognize the role and responsibility of audience as an integral part of dramatic presentations (QCC) (FAST_A2005-8)

B - Perception and Analysis
• analyze and evaluate dramatic text as a basis for technical theatre decisions (QCC) (FAST_B2005-9)
• analyze and evaluate elements of technical theatre (QCC) (FAST_B2005-10)
• recognize how technical design shapes mood and meaning in theatre productions (QCC) (FAST_B2005-11)
• synthesize knowledge of other arts into creation of theatre production and design (QCC) (FAST_B2005-12)

C - Cultural and Historical Context
• analyze personal discipline, knowledge, and skills requisite for a career in technical theatre (QCC) (FAST_C2005-13)
• employ knowledge of cultural, social, and political aspects of theatre heritage to enhance and evaluate theatrical performances (QCC, CE) (FAST_C2005-14)

THEATRE PRODUCTION WORKSHOP / ADVANCED THEATRE WORKSHOP / MUSICAL PRODUCTION WORKSHOP

A - Creation and Performance
• synthesize acting techniques to develop character (QCC) (FATP_A2005-1)
• collaborate with others effectively to produce and evaluate theatre (QCC, CE) (FATP_A2005-2)
• use movement appropriately as integral element of theatre productions (QCC) (FATP_A2005-3)
• apply vocal techniques to create characters in theatre productions (QCC) (FATP_A2005-4)
• develop competencies relating to individual responsibility to group as pertains to attendance, punctuality, cooperation, leadership, listening, preparation, and acceptable behavior (QCC, CE) (FATP_A2005-5)

B - Perception and Analysis
• employ technique and vocabulary in technical theatre (QCC) (FATP_B2005-6)
• analyze dramatic elements of text as a basis for production (QCC) (FATP_B2005-7)
• evaluate process and product of theatre arts through individual and group assessment (QCC) (FATP_B2005-8)
• synthesize knowledge of other arts into creation of theatre production (QCC) (FATP_B2005-9)
• respond to theatre art as an effort to communicate, interpret, and intensify human experience (FATP_B2005-10)

C - Cultural and Historical Context
• recognize and analyze personal and universal meanings in drama/theatre (QCC, CE) (FATP_C2005-11)
• describe and analyze selected occupations and resources in theatre (QCC, CE) (FATP_C2005-12)
• explore cultural and historic aspects of theatre heritage in solving theatrical problems (QCC, CE) (FATP_C2005-13)
ARCHITECTURAL DESIGN

A - Creation and Performance
• employ creative solutions to produce architectural drawings and models using a variety of media (CE) (VAAR_A2005-1)
• apply knowledge of elements of art and principles of design in creating architectural spaces (VAAR_A2005-2)
• display work habits and craftsmanship appropriate to the processes and specialized equipment being used (CE) (VAAR_A2005-3)
• make independent decisions and evaluative judgments during the creative process and in resolution of design problems (CE) (VAAR_A2005-4)
• work both individually and collaboratively to solve spatial design problems (CE) (VAAR_A2005-5)

B - Perception and Analysis
• recognize and identify a variety of structural support systems and basic building construction techniques (VAAR_B2005-6)
• use specialized environmental design vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (VAAR_B2005-7)
• explore the relationships between architectural design and other disciplines (VAAR_B2005-8)
• discuss aesthetic issues related to architecture (VAAR_B2005-9)
• select, present, and display architecture projects in an aesthetically appealing manner (VAAR_B2005-10)

C - Cultural and Historical Context
• explore contemporary and historical developments related to architecture and environmental design (VAAR_C2005-11)
• describe and analyze distinguishing characteristics of the architectural and environmental creations of various architects, periods, and styles (VAAR_C2005-12)
• describe and analyze career opportunities related to architecture, including landscape architecture, interior design, and industrial design (CE) (VAAR_C2005-13)

COMMERCIAL PHOTOGRAPHY I – BASIC BLACK AND WHITE

A - Creation and Performance
• utilize proper settings and operations on an adjustable manual 35mm single lens reflex camera (SAT) (VAP1_A2005-1)
• employ proper changing and settings of lenses for a SLR camera (VAP1_A2005-2)
• measure light in various situations using in-camera and hand-held light meters (VAP1_A2005-3)
• analyze effect of f-stops, film speed, and shutter speeds on film by running exposure tests (VAP1_A2005-4)
• describe differences in film types in relation to film speed (VAP1_A2005-5)
• compose photographs as viewed through a 35mm SLR camera and make exposures using the correct light readings, f-stops, shutter speed, and film speeds (QCC) (VAP1_A2005-6)
• identify various types of flash units, guide numbers, basic uses of flash, and attachments / equipment for measuring flash (VAP1_A2005-7)
• apply knowledge of safety procedures (QCC) (VAP1_A2005-8)
• identify, measure, and mix chemistry for photo-sensitive materials (VAP1_A2005-9)
• develop, dry, inspect, and evaluate negatives (VAP1_A2005-10)
• set-up photographic enlarger and attachments for exposing paper (VAP1_A2005-11)
• identify and select different paper grades and surfaces for black and white printing (VAP1_A2005-12)
• produce non-corrected and corrected contact proof sheets as needed for assignments (VAP1_A2005-13)
• set-up darkroom sink and solutions in trays for developing black and white photographic prints (VAP1_A2005-14)
• produce clean, sharp, black and white photographs (QCC) (VAP1_A2005-15)
• inspect and retouch prints (VAP1_A2005-16)
• measure, tack, mount, and finish prints (VAP1_A2005-17)
• explore basic kinds of cameras and their uses in professional photography (VAP1_A2005-18)
B - Perception and Analysis
- define and apply specialized vocabulary associated with photographic media (QCC) (VAP1_B2005-19)
- recognize and identify various art forms created by photographic media (QCC) (VAP1_B2005-20)
- select, present, and display photographic images in an aesthetically pleasing manner (QCC) (VAP1_B2005-21)

C - Cultural and Historical Context
- explore contemporary and historical developments in photography (QCC) (VAP1_C2005-22)
- describe and analyze career opportunities and requirements in photography (artistic and commercial) (QCC, CE) (VAP1_C2005-23)

COMMERCIAL PHOTOGRAPHY II – STUDIO TECHNIQUES

A - Creation and Performance
- identify the key parts and equipment of a commercial studio (VAP2_A2005-1)
- identify operational parts and utilize basic operations of medium format camera (VAP2_A2005-2)
- utilize working knowledge of peripheral studio equipment (QCC) (VAP2_A2005-3)
- apply basic operations of studio flash meter (VAP2_A2005-4)
- identify types and uses of basic studio lighting (VAP2_A2005-5)
- utilize backdrops and props for commercial use (VAP2_A2005-6)
- produce correctly exposed negatives for capturing personalities in portrait form using correct combination of elements (VAP2_A2005-7)
- produce formal male and female portraits using a single light source with fill light (QCC) (VAP2_A2005-8)
- produce formal male and female portraits using multiple flashes (VAP2_A2005-9)
- produce formal male and female portraits using Rembrandt (VAP2_A2005-10)
- produce formal male and female portraits using butterfly (VAP2_A2005-11)
- produce formal group portraits using conservative and informal groupings (VAP2_A2005-12)
- produce an environmental portrait (VAP2_A2005-13)
- paint with light in studio (VAP2_A2005-14)
- load, attach, and operate Polaroid back for medium format camera (VAP2_A2005-15)
- record all darkroom data (set-up, exposure, and development information) as record of work so it can be replicated (VAP2_A2005-16)
- set-up darkroom and equipment for making black and white prints (VAP2_A2005-17)
- produce clean, sharp, black and white photographs using medium format negatives (QCC) (VAP2_A2005-18)
- inspect and retouch prints (VAP2_A2005-19)
- measure, tack, mount, and finish prints (VAP2_A2005-20)
- prepare and present portfolio for critique (QCC) (VAP2_A2005-21)

B - Perception and Analysis
- use specialized vocabulary associated with photographic media (QCC) (VAP2_B2005-22)
- analyze current professional work for creativity and methods (QCC) (VAP2_B2005-23)
- explore contemporary business trends and types of work in photography (QCC, CE) (VAP2_B2005-24)
- describe and analyze career opportunities related to commercial photography (QCC, CE) (VAP2_B2005-25)
COMMERCIAL PHOTOGRAPHY III – DIGITAL PHOTOGRAPHY

A - Creation and Performance
• demonstrate the operation of various digital cameras (QCC) (VAP3_A2005-1)
• manipulate images for publication within a photo-imaging program (QCC) (VAP3_A2005-2)
• create and produce images for publications from self-generated artwork/photographs using flatbed scanner (QCC) (VAP3_A2005-3)
• create and produce images for publications from digital still camera using photo-imaging program (QCC) (VAP3_A2005-4)
• create and produce images for publications from camcorder/video camera using photo-imaging program (QCC) (VAP3_A2005-5)
• create and produce images for publications using black and white 35 mm negatives scanned through film scanner (QCC) (VAP3_A2005-6)
• create and produce images for publications using color 35-mm negatives scanned through film scanner (QCC) (VAP3_A2005-7)
• set up a fully equipped studio to make portraits using digital equipment (QCC) (VAP3_A2005-9)
• apply basic operations of a studio flash meter in relation to digital photography (QCC) (VAP3_A2005-10)
• figure out the types and uses of basic studio lighting (QCC) (VAP3_A2005-11)
• set up a digital studio camera and computer for making portraits in the studio (QCC) (VAP3_A2005-12)
• use backdrops and props for commercial use (QCC) (VAP3_A2005-13)
• produce a successful formal female portrait using a single light source with a digital camera (color) (QCC) (VAP3_A2005-14)
• produce a successful formal male portrait using a single light source with fill light using a digital camera (color) (QCC) (VAP3_A2005-15)
• produce successful formal male and female portraits using multiple lights with a digital camera (color) (QCC) (VAP3_A2005-16)
• produce a successful advertising image using digital camera (color or black and white) (QCC) (VAP3_A2005-17)
• construct data log of work, setup, and exposure information for replication purposes (QCC) (VAP3_A2005-18)

B - Perception and Analysis
• use specialized vocabulary associated with digital media (QCC) (VAP3_B2005-19)
• recognize and identify various forms created by digital media (QCC) (VAP3_B2005-20)
• prepare a portfolio for critique and consideration as an exit portfolio presentation (QCC) (VAP3_B2005-21)
• present and display digital images in an aesthetically pleasing manner (QCC) (VAP3_B2005-22)

C - Cultural and Historical Context
• discuss contemporary developments in digital photography (QCC) (VAP3_C2005-23)
• describe and analyze characteristics of digital photographs (QCC) (VAP3_C2005-24)
• describe and analyze career opportunities related to photo-imaging and digital photography (QCC) (VAP3_C2005-25)

COMMERCIAL PHOTOGRAPHY IV - NON-TRADITIONAL PRINTING TECHNIQUES

A - Creation and Performance
• identify various substrate types and describe their use in industry (QCC) (VAP4_A2005-1)
• identify various printing and production methods used in fine and commercial photographic design (QCC) (VAP4_A2005-2)
• describe the use and applications of photographic film and emulsion techniques (QCC) (VAP4_A2005-3)
• set up and expose ortho film (QCC) (VAP4_A2005-4)
• mix chemicals safely for orthochromatic films (QCC) (VAP4_A2005-5)
• develop, inspect, and evaluate orthochromatic films (QCC) (VAP4_A2005-6)
• contact printing companies to make film positives or duplicate films (QCC) (VAP4_A2005-7)
• expose direct emulsion screens and other materials (QCC) (VAP4_A2005-8)
A - Creation and Performance *(continued)*
- utilize creative solutions in producing print editions using the photo screen method (QCC) (VAP4_A2005-9)
- expose and process color transparency films (QCC) (VAP4_A2005-10)
- create Polaroid transfer print and Polaroid emulsion transfer (QCC) (VAP4_A2005-11)
- use images lifted from printed material to create new images (QCC) (VAP4_A2005-12)
- use images rubbed from printed material to create new images (QCC) (VAP4_A2005-13)
- pass safety hazards test (QCC) (VAP4_A2005-14)
- identify, measure, and mix chemicals for photosensitive materials (QCC) (VAP4_A2005-15)
- produce cyanotype print (QCC) (VAP4_A2005-16)
- create Van Dyke Brown print (QCC) (VAP4_A2005-17)
- produce gum bichromate print (QCC) (VAP4_A2005-18)
- demonstrate chemical toning and hand-tinting black and white photographs (QCC) (VAP4_A2005-19)
- hand-color black and white and toned photographs (QCC) (VAP4_A2005-20)

B - Perception and Analysis
- employ specialized vocabulary of fine art photography (QCC) (VAP4_B2005-21)
- identify various forms created by fine art printing methods (QCC) (VAP4_B2005-22)
- prepare portfolio for critique and consideration as an exit portfolio presentation (QCC) (VAP4_B2005-23)
- present and display fine art prints in an aesthetically pleasing manner (QCC) (VAP4_B2005-24)

C - Cultural and Historical Context
- discuss contemporary and historic developments in fine art photographic printing (QCC) (VAP4_C2005-25)
- analyze characteristics of fine art photographs (QCC) (VAP4_C2005-26)
- describe and analyze career opportunities related to fine art photography and printing (QCC) (VAP4_C2005-27)

COMPUTER APPLICATIONS IN ART

A - Creation and Performance
- select and use variety of electronic media, software, techniques, and equipment to solve computer art problems (QCC) (VACA_A2005-1)
- apply knowledge of elements of art and principles of design in creating computer art (QCC) (VACA_A2005-2)
- display work habits and craftsmanship appropriate to media and equipment being used (QCC, CE) (VACA_A2005-3)
- make independent decisions and evaluative judgments during the creative process and in resolution of specific computer art problems (QCC, CE) (VACA_A2005-4)
- use a variety of computer art tools to organize and convey ideas, emotions, and moods (QCC) (VACA_A2005-5)

B - Perception and Analysis
- use specialized computer art vocabulary to critically analyze and evaluate artwork and relate knowledge of frequently used processes and equipment (QCC) (VACA_B2005-6)
- recognize and identify variety of media related to the computer arts (QCC) (VACA_B2005-7)
- explore relationships between computer arts and other disciplines (QCC) (VACA_B2005-8)
- select, present, and display computer art and photo imaging projects in an aesthetically appealing manner (VACA_B2005-9)
- discuss aesthetic issues as related to computer art (QCC) (VACA_B2005-10)

C - Cultural and Historical Context
- explore contemporary, legal, and historical developments related to computer arts (QCC) (VACA_C2005-11)
- describe and analyze relationships between computer art and other visual arts (QCC) (VACA_C2005-12)
- describe and analyze career opportunities in business and industry related to computer arts (QCC, CE) (VACA_C2005-13)
CRAFTS DESIGN

A - Creation and Performance
• use a variety of crafts media, techniques, and equipment to solve visual art problems (QCC) (VACR_A2005-1)
• apply knowledge of elements of art and principles of design in creating crafts (QCC) (VACR_A2005-2)
• display work habits and craftsmanship appropriate to the media and equipment being used (CE) (VACR_A2005-3)
• make independent decisions and evaluative judgments during the creative process and in resolution of specific crafts problems (QCC, CE) (VACR_A2005-4)
• use a variety of craft tools and skills to organize and convey ideas, feelings, and moods (QCC) (VACR_A2005-5)

B - Perception and Analysis
• use specialized crafts design vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VACR_B2005-6)
• recognize and identify variety of crafts media (QCC) (VACR_B2005-7)
• explore relationship between crafts and other disciplines (QCC) (VACR_B2005-8)
• discuss aesthetic issues related to crafts (QCC) (VACR_B2005-9)
• select, present, and display crafts projects in an aesthetically appealing manner (VACR_B2005-10)

C - Cultural and Historical Context
• explore contemporary and historical developments related to crafts (QCC) (VACR_C2005-11)
• describe and analyze characteristics of crafts of various artists, periods, and styles (QCC) (VACR_C2005-12)
• describe and analyze career opportunities related to crafts (QCC, CE) (VACR_C2005-13)

DRAWING AND PAINTING

A - Creation and Performance
• use a variety of drawing and painting media, techniques, and equipment to solve visual art problems (QCC) (VADP_A2005-1)
• apply knowledge of elements of art and principles of design in creating drawings and paintings (QCC) (VADP_A2005-2)
• display work habits and craftsmanship appropriate to media and equipment being used (QCC, CE) (VADP_A2005-3)
• make independent decisions and evaluative judgments during the creative process and in resolution specific drawing and/or painting problems (QCC, CE) (VADP_A2005-4)
• use a variety of drawing and painting tools and skills to organize and convey ideas, feelings, and moods (QCC) (VADP_A2005-5)

B - Perception and Analysis
• use specialized drawing and painting vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VADP_B2005-6)
• recognize and identify variety of drawing and painting media (QCC) (VADP_B2005-7)
• explore relationships between visual arts and other disciplines (QCC) (VADP_B2005-8)
• discuss aesthetic issues related to drawing and painting (QCC) (VADP_B2005-9)
• select, present, and display drawing and painting projects in an aesthetically appealing manner (VADP_B2005-10)

C - Cultural and Historical Context
• explore contemporary and historical developments related to drawing and painting (QCC) (VADP_C2005-11)
• describe and analyze characteristics of drawings and paintings of various artists, periods, and styles (QCC) (VADP_C2005-12)
• describe and analyze career opportunities related to drawing and painting (QCC, CE) (VADP_C2005-13)
GRAPHIC DESIGN
A - Creation and Performance
• select and use a variety of media, techniques, and equipment to solve graphic design problems (QCC) (VAGD_A2005-1)
• apply knowledge of elements of art and principles of design in creating graphic designs (QCC) (VAGD_A2005-2)
• display work habits and craftsmanship appropriate to media and equipment being used (QCC, CE) (VAGD_A2005-3)
• make independent decisions and evaluative judgments during the creative process and in resolution of specific graphic design problems (QCC, CE) (VAGD_A2005-4)
• employ a variety of graphic design tools and skills to organize and convey ideas, emotions, and moods (QCC) (VAGD_A2005-5)
• produce graphic design layouts that combine image and type to communicate effectively to specific audience (VAGD_A2005-6)

B - Perception and Analysis
• use specialized graphic design vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VAGD_B2005-7)
• recognize and identify variety of media related to graphic design (QCC) (VAGD_B2005-8)
• explore relationship between graphic design and other disciplines (QCC) (VAGD_B2005-9)
• discuss aesthetic issues related to graphic design (QCC) (VAGD_B2005-10)
• select, present, and display graphic design projects in an aesthetically appealing manner (QCC) (VAGD_B2005-11)

C - Cultural and Historical Context
• explore contemporary and historical developments related to graphic design (QCC) (VAGD_C2005-12)
• describe and analyze characteristics of graphic designs of various artists, periods, and styles (QCC) (VAGD_C2005-13)
• describe and analyze career opportunities in graphic design (QCC, CE) (VAGD_C2005-14)

JEWELRY AND METALWORKING
A - Creation and Performance
• employ creative solutions in creating jewelry and metal forms using a variety of materials, construction techniques, and surface treatments (CE) (VAJM_A2005-1)
• apply knowledge of elements of art and principles of design in creating jewelry and metal forms (VAJM_A2005-2)
• display work habits and craftsmanship appropriate to media and equipment being used (CE) (VAJM_A2005-3)
• make independent decisions and evaluative judgments during creative process and in resolution of specific jewelry and metalworking problems (CE) (VAJM_A2005-4)
• employ metalworking techniques to organize and convey thematic content, ideas, emotions, or moods (VAJM_A2005-5)

B - Perception and Analysis
• use specialized jewelry and metalworking vocabulary in critical analysis and evaluation of one’s own work and work of others (VAJM_B2005-6)
• identify significant characteristics of jewelry and metalworking techniques used in creation of specific works of art (VAJM_B2005-7)
• explore relationship between jewelry/metalworking and other disciplines (VAJM_B2005-8)
• discuss aesthetic issues related to jewelry and metalworking (VAJM_B2005-9)
• select, present, and display jewelry and metalworking projects in an aesthetically appealing manner (VAJM_B2005-10)

C - Cultural and Historical Context
• explore contemporary and historical developments within the jewelry and metalworking media (VAJM_C2005-11)
• describe and analyze distinguishing characteristics of various jewelry and metalworking styles (VAJM_C2005-12)
• describe and analyze career opportunities in jewelry and metalworking (CE) (VAJM_C2005-13)
PHOTO DESIGN

A - Creation and Performance
• employ creative solutions in producing photographs using variety of approaches to composition and subject manner (QCC) (VAPD_A2005-1)
• apply knowledge of elements of art and principles of design in creating photographic artworks (QCC) (VAPD_A2005-2)
• display work habits and craftsmanship appropriate to the photographic process and specialized equipment being used (QCC, CE) (VAPD_A2005-3)
• make independent decisions and evaluate judgments during creative process and in resolution of specific photo design problems (QCC, CE) (VAPD_A2005-4)
• use photographic technology to organize and convey thematic content, ideas, feelings, or moods (QCC) (VAPD_A2005-5)

B - Perception and Analysis
• use specialized photographic media vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VAPD_B2005-6)
• recognize and identify various visual forms created using photographic media (QCC) (VAPD_B2005-7)
• explore relationships between visual arts and other disciplines (QCC) (VAPD_B2005-8)
• discuss aesthetic issues related to photo design (QCC) (VAPD_B2005-9)
• select, present, and display photographic images in an aesthetically appealing manner (QCC) (VAPD_B2005-10)

C - Cultural and Historical Context
• explore contemporary and historical developments related to photographic design (QCC) (VAPD_C2005-11)
• describe and analyze distinguishing characteristics of photographs of various artists and styles (QCC) (VAPD_C2005-12)
• describe and analyze career opportunities related to photography (QCC, CE) (VAPD_C2005-13)

POTTERY

A - Creation and Performance
• employ creative solutions in producing clay forms and pottery using variety of construction methods and surface treatments (QCC, CE) (VAPO_A2005-1)
• apply knowledge of elements of art and principles of design in creating clay forms (QCC) (VAPO_A2005-2)
• display work habits and craftsmanship appropriate to media and equipment being used (QCC, CE) (VAPO_A2005-3)
• make independent decisions and evaluative judgments during creative process and in resolution of specific pottery design problems (QCC, CE) (VAPO_A2005-4)
• use clay construction techniques to organize and convey thematic content, ideas, feelings, or moods (QCC) (VAPO_A2005-5)
• explore the wheel-thrown method of pottery creation (QCC) (VAPO_A2005-6)

B - Perception and Analysis
• use specialized clay and pottery vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VAPO_B2005-7)
• recognize and identify a variety of pottery construction, decoration, and firing techniques (QCC) (VAPO_B2005-8)
• analyze pottery form and its relationship to function (QCC) (VAPO_B2005-9)
• explore the relationships of basic chemical processes and glazes, various firing processes, and chemical changes during those processes (QCC) (VAPO_B2005-10)
• explore relationships between pottery and other disciplines (QCC) (VAPO_B2005-11)
• discuss aesthetic issues related to pottery (QCC) (VAPO_B2005-12)
• select, present, and display pottery projects in an aesthetically appealing manner (QCC) (VAPO_B2005-13)
C - Cultural and Historical Context
• explore contemporary and historical developments in the clay medium (QCC) (VAPO_C2005-14)
• describe and analyze distinguishing characteristics of clay forms and pottery of various artists and styles (QCC) (VAPO_C2005-15)
• describe and analyze careers related to art in business and industry, especially those related to the disciplines of clay medium (QCC, CE) (VAPO_C2005-16)

PRINTMAKING
A - Creation and Performance
• employ creative solutions in producing editions of prints using a variety of printing techniques (QCC, CE) (VAPM_A2005-1)
• apply knowledge of elements of art and principles of design in creating prints (QCC) (VAPM_A2005-2)
• display work habits and craftsmanship appropriate to printing process and specialized equipment being used (QCC, CE) (VAPM_A2005-3)
• make independent decisions and evaluative judgments during creative process and in resolution of specific printmaking design problems (QCC, CE) (VAPM_A2005-4)
• employ printmaking media to organize and convey thematic content, ideas, feelings, or moods (QCC) (VAPM_A2005-5)
• explore new technology for printmaking, such as computers, printers, scanners, and copy machines (QCC) (VAPM_A2005-6)

B - Perception and Analysis
• use specialized printmaking media vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VAPM_B2005-7)
• recognize and identify variety of printmaking media including relief, intaglio, lithographic, and serigraphic processes (QCC) (VAPM_B2005-8)
• explore relationships between printmaking and other disciplines (QCC) (VAPM_B2005-9)
• discuss aesthetic issues related to printmaking (QCC) (VAPM_B2005-10)
• select, present, and display printmaking projects in an aesthetically appealing manner (QCC) (VAPM_B2005-11)

C - Cultural and Historical Context
• explore contemporary and historical developments related to printmaking (QCC) (VAPM_C2005-12)
• describe and analyze distinguishing characteristics of prints of various artists, periods, and styles (QCC) (VAPM_C2005-13)
• describe and analyze career opportunities related to printmaking (QCC, CE) (VAPM_C2005-14)

SCULPTURE
A - Creation and Performance
• use a variety of sculpture media, techniques, and equipment to solve visual art problems (QCC) (VASC_A2005-1)
• apply knowledge of elements of art and principles of design in creating sculpture (QCC) (VASC_A2005-2)
• display work habits and craftsmanship appropriate to media and equipment being used (QCC, CE) (VASC_A2005-3)
• make independent decisions and evaluative judgments during creative process and in resolution of specific sculpture problems (QCC, CE) (VASC_A2005-4)
• use sculpture media to organize and convey thematic content, ideas, feelings, or mood (QCC) (VASC_A2005-5)

B - Perception and Analysis
• use specialized sculpture media vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VASC_B2005-6)
• recognize and identify a variety of sculpture media (QCC) (VASC_B2005-7)
• explore relationships between sculpture and other disciplines (QCC) (VASC_B2005-8)
B - Perception and Analysis (continued)
- discuss aesthetic issues related to sculpture (QCC) (VASC_B2005-9)
- select, present, and display sculpture projects in an aesthetically appealing manner (QCC) (VASC_B2005-10)

C - Cultural and Historical Context
- explore contemporary and historical developments related to sculpture (QCC) (VASC_C2005-11)
- describe and analyze characteristics of sculptures of various artists, periods, and styles (QCC) (VASC_C2005-12)
- describe and analyze career opportunities related to sculpture (QCC, CE) (VASC_C2005-13)

THREE-DIMENSIONAL DESIGN

A - Creation and Performance
- develop creative solutions to 3-D design problems using variety of forming techniques and media (QCC) (VA3D_A2005-1)
- apply knowledge of elements of art and principles of design as they relate to 3-D forms (QCC) (VA3D_A2005-2)
- employ work habits and craftsmanship appropriate to the media and equipment being used (QCC, CE) (VA3D_A2005-3)
- make independent decisions and evaluative judgments during creative process and in resolution of specific 3-D design problems (QCC, CE) (VA3D_A2005-4)

B - Perception and Analysis
- use specialized 3-D design vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VA3D_B2005-5)
- identify a variety of 3-D design media (VA3D_B2005-6)
- explore relationships between 3-D design and other disciplines (QCC) (VA3D_B2005-7)
- discuss aesthetic issues related to 3-D design (QCC) (VA3D_B2005-8)
- select, present, and display 3-D projects in an aesthetically appealing manner (QCC) (VA3D_B2005-9)

C - Cultural and Historical Context
- explore contemporary and historical developments related to 3-D design (QCC) (VA3D_C2005-10)
- describe and analyze career opportunities in visual art (QCC, CE) (VA3D_C2005-11)

TWO-DIMENSIONAL DESIGN

A - Creation and Performance
- develop creative solutions to 2-D design problems using variety of media and techniques (QCC) (VA2D_A2005-1)
- apply knowledge of elements of art and principles of design as they relate to 2-D works of art (QCC) (VA2D_A2005-2)
- display work habits and craftsmanship appropriate to the media and equipment being used (QCC, CE) (VA2D_A2005-3)
- make independent decisions and evaluative judgments during creative process and in resolution of specific 2-D design problems (QCC, CE) (VA2D_A2005-4)

B - Perception and Analysis
- use specialized 2-D design vocabulary to critically analyze and evaluate artworks and relate knowledge of frequently used processes and equipment (QCC) (VA2D_B2005-5)
- identify a variety of 2-D design media (QCC) (VA2D_B2005-6)
- explore relationship between 2-D design and other disciplines (QCC) (VA2D_B2005-7)
- discuss aesthetic issues related to 2-D design (QCC) (VA2D_B2005-8)
- select, present, and display 2-D art in an aesthetically appealing manner (QCC) (VA2D_B2005-9)
C - Cultural and Historical Context

- explore contemporary and historical developments related to 2-D design (QCC) (VA2D_C2005-10)
- describe and analyze career opportunities in visual art (QCC, CE) (VA2D_C2005-11)
GIFTED DIRECTED STUDY

A -
- select and narrow topic and research questions (QCC) (GEDS_A2001-1)
- use search engines to locate databases and online information (QCC) (GEDS_A2001-2)
- use reference works to gather information: books, periodicals, dictionaries, thesauruses, encyclopedias, atlases, almanacs, CDROM, databases, and Internet (QCC) (GEDS_A2001-3)
- formulate appropriate research questions (QCC, HSGT) (GEDS_A2001-4)
- determine the adequacy and/or relevancy of information (GEDS_A2001-5)
- identify issues and/or problems (QCC, HSGT) (GEDS_A2001-6)
- draw conclusions and make generalizations (QCC, HSGT) (GEDS_A2001-7)
- apply critical-thinking skills (GEDS_A2001-8)
- document sources of quotations, ideas, and facts (QCC) (GEDS_A2001-9)
- establish time management skills and effectively put them to use (e.g., schedules, organization, record keeping) (GEDS_A2001-10)
- present information through reports, demonstrations, and projects (QCC) (GEDS_A2001-11)

GIFTED INTERNSHIP

A - Preparation for Work
- prepare appropriate résumé (GPS) (GEQU_A1998-1)
- prepare appropriate letter of application (GEQU_A1998-2)
- participate in mock interview practice (GEQU_A1998-3)
- summarize research on career paths in profession of interest (GEQU_A1998-4)
- identify interests, aptitudes, and abilities that will contribute to a career choice (GEQU_A1998-5)
- complete interview process, including completion of procedural requirements, preparation for interview, and appropriate follow up (GEQU_A1998-6)
- evaluate appropriateness of proposed internship experience (GEQU_A1998-7)

B - Exploration of the Career Field
- verify hours earned on consistent basis (GEQU_B1998-8)
- describe work experience on consistent basis (GEQU_B1998-9)
- identify time management issues related to the career field (GEQU_B1998-10)
- develop personal list of learning goals for internship experience (GEQU_B1998-11)
- identify and use professional journals in the career field for career exploration (GEQU_B1998-12)

C - Demonstration of Acceptable Work Habits
- display businesslike demeanor on the job (GEQU_C1998-13)
- dress appropriately to work situation (GEQU_C1998-14)
- exhibit skills and growth in initiative, human relations, and job knowledge (GEQU_C1998-15)
- communicate effectively (GEQU_C1998-16)
- accept and respond appropriately to criticism (GEQU_C1998-17)
- exhibit traits of honesty and truthfulness (CE) (GEQU_C1998-18)
- demonstrate characteristics of a team player (CE) (GEQU_C1998-19)
- adapt to the work environment (GEQU_C1998-20)
- cooperate with mentors, peers, clients, and/or customers (CE) (GEQU_C1998-21)
C - Demonstration of Acceptable Work Habits (continued)
• demonstrate the ability to maintain confidentiality (CE) (GEQU_C1998-22)
• show positive attitude, enthusiasm, and energy (CE) (GEQU_C1998-23)
• attend and participate in required seminars (GEQU_C1998-24)

D - Response to Evaluation
• appraise evaluations by supervisors (GEQU_D1998-25)
• use supporting evidence to respond appropriately to evaluations (GEQU_D1998-26)
FIRST AID AND CPR

A - The Emergency Medical System
• discuss how the Emergency Medical System (EMS) works and the role of citizen responders (HLFR_A2009-1)
• list the three Emergency Action Steps and explain how to apply each one (HLFR_A2009-2)

B - Anatomy and Body Systems
• identify the body systems and their functions (HLFR_B2009-3)
• demonstrate how to check for life-threatening conditions (HLFR_B2009-4)

C – Life-Threatening Emergencies
• describe how and when to provide rescue breathing for an infant and child (HLFR_C2009-5)
• describe and demonstrate the care for conscious and unconscious infant, child, and adult choking victims (HLFR_C2009-6)
• identify the signs and symptoms of a heart attack for an infant, child, and adult (HLFR_C2009-7)
• demonstrate how to give cardiopulmonary resuscitation (CPR) for an infant, child, and adult (HLFR_C2009-8)
• identify the signs and symptoms of internal and external bleeding and describe the care for both (HLFR_C2009-9)
• identify the signs and symptoms of shock and describe what care is given to minimize shock (HLFR_C2009-10)
• identify the signs and symptoms of a stroke and describe the care for stroke victims (HLFR_C2009-11)

D - Injuries
• list signs and symptoms of infected wounds and describe how to care for them (HLFR_D2009-12)
• describe how to care for open and closed wounds (HLFR_D2009-13)
• describe the different types of burns and how to care for each (HLFR_D2009-14)
• assess and diagnose injuries to the upper and lower extremities and describe different methods of immobilization (HLFR_D2009-15)
• describe the signs, symptoms, and care for head, neck, and back injuries (HLFR_D2009-16)
• describe the signs, symptoms, and care for abdominal and pelvic injuries (HLFR_D2009-17)

E - Medical Emergencies
• describe the signs, symptoms, and care for sudden illnesses (HLFR_E2009-18)
• describe the signs, symptoms, and care for victims of ingested, inhaled, and absorbed poisons (HLFR_E2009-19)
• describe the signs, symptoms, and care for victims of bite and sting injuries (HLFR_E2009-20)
• list signs and symptoms of substance abuse and care for drug-related emergencies (HLFR_E2009-21)
• describe the signs, symptoms, and care for illness and injury caused by heat and cold exposure (HLFR_E2009-22)
• describe the assessment, transport, and care of victims in water emergencies (HLFR_E2009-23)
• describe the assessment, transport, and care of victims in special rescue situations (HLFR_E2009-24)
• compare and contrast the differing needs of diverse groups requiring emergency medical care (HLFR_E2009-25)
• describe and plan how to respond to and provide care for persons where help is delayed (HLFR_E2009-26)
INTRODUCTION TO HEALTH

A - First Aid
• demonstrate ability to properly respond to a variety of emergency situations (QCC) (HL09_A2009-1)

B - Safety
• evaluate one's personal responsibility for the safety of self and others when operating or occupying a motor vehicle (HL09_B2009-2)
• identify threats and responses related to personal safety (HL09_B2009-3)

C - Personal Care
• evaluate and improve personal health practices (QCC, CE) (HL09_C2009-4)

D - Disease Prevention
• analyze how potential risk behaviors associated with the leading causes of morbidity and mortality can be minimized through healthful practices (QCC) (HL09_D2009-5)
• assess prevalence, modes of transmission, symptoms, and diagnostic tests for sexually transmitted diseases and HIV (QCC) (HL09_D2009-6)
• assess methods of prevention for contracting sexually transmitted diseases, including HIV, with particular emphasis on abstinence as the only sure way to prevent sexually transmitted diseases (QCC) (HL09_D2009-7)

E - Tobacco, Alcohol, and Other Drugs
• assess the roles and responsibilities of individuals, communities, and government in preventing and controlling substance abuse (QCC) (HL09_E2009-8)
• determine how adolescent alcohol and other drug use contribute to crime and suicide (QCC) (HL09_E2009-9)
• analyze how alcohol and other drug use impact personal goals, educational opportunities, and occupational choices (QCC) (HL09_E2009-10)

F - Nutrition
• critically evaluate nutrition claims from the media (QCC) (HL09_F2009-11)
• design diets meeting health requirements for adolescents according to the recommended dietary allowances and for people with specific health problems or restrictions (QCC) (HL09_F2009-12)
• evaluate diet relative to personal needs, dietary guidelines, and energy balance (QCC) (HL09_F2009-13)

G - Emotional Expression / Mental Health
• contrast constructive and destructive ways of resolving concerns and conflicts (QCC, CE) (HL09_G2009-14)
• analyze stress and its effects on all aspects of health and wellness (QCC) (HL09_G2009-15)
• evaluate various ways of preventing violence (QCC) (HL09_G2009-16)

H - Family Life
• examine attitudes and behaviors essential to the growth and maintenance of positive human relationships (QCC) (HL09_H2009-17)
• explain the need to make conscious decisions regarding sexuality based on family values, personal responsibilities, self interests, and future goals (QCC) (HL09_H2009-18)
• distinguish factors that promote a positive self-image (QCC) (HL09_H2009-19)
• trace the human growth cycle from the prenatal period through the elderly stage (QCC) (HL09_H2009-20)
• review the nature and purposes of dating including family guidelines, functions of dating, coping with the pressures, and the importance of setting standards for controlling sexual behavior (QCC) (HL09_H2009-21)
• analyze the skills and attitudes needed to become competent parents (QCC) (HL09_H2009-22)
I - Anatomy and Physiology

- review the circulatory, digestive, cardiovascular, nervous, and lymphatic systems (HL09_I2009-23)
ADVANCED FASHION MARKETING

A - Economics of Fashion
• review the evolution and movement of fashion (GPS) (MKFM_A2009-1)
• analyze economics in the fashion industry (GPS) (MKFM_A2009-2)
• identify major laws that regulate and/or impact the fashion industry (GPS) (MKFM_A2009-3)

B - Fashion Merchandising, Buying, and Inventory Management
• describe the product selection process for fashion buying (GPS) (MKFM_B2009-4)
• evaluate various market centers and relate their importance to merchandising decisions (GPS) (MKFM_B2009-5)
• analyze the importance of utilizing an efficient distribution system (GPS) (MKFM_B2009-6)
• describe factors to consider when developing a merchandise plan and budget for a business (GPS) (MKFM_B2009-7)
• implement an inventory management plan and compute product pricing utilizing cost control methods (GPS) (MKFM_B2009-8)

C - Fashion Promotion
• develop visual merchandising and presentations (GPS) (MKFM_C2009-9)
• evaluate the effects of advertising in the fashion industry (GPS) (MKFM_C2009-10)
• create a fashion promotion plan (GPS) (MKFM_C2009-11)

D - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKFM_D2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKFM_D2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKFM_D2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKFM_D2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKFM_D2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKFM_D2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKFM_D2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKFM_D2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKFM_D2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKFM_D2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKFM_D2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKFM_D2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKFM_D2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKFM_D2012-14)
D - Literacy Standards (continued)
\begin{itemize}
\item use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKFM_D2012-15)
\item conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKFM_D2012-16)
\item gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKFM_D2012-17)
\item draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKFM_D2012-18)
\item 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 (CCGPS) (MKFM_D2012-19)
\end{itemize}

ADVANCED MARKETING

A - Applying Economics in Marketing
\begin{itemize}
\item utilize social studies skills in marketing, sales, and service to obtain understanding of customers and the economic environment in which they function (GPS) (MKAM_A2009-1)
\end{itemize}

B - Examining Distribution
\begin{itemize}
\item utilize distribution knowledge and skills to manage supply-chain activities (GPS) (MKAM_B2009-2)
\end{itemize}

C - Examining Finance
\begin{itemize}
\item evaluate financial systems to enhance their impact on business and marketing operations and decisions (GPS) (MKAM_C2009-3)
\end{itemize}

D - Managing Marketing Information
\begin{itemize}
\item gather, synthesize, evaluate, and disseminate marketing information to make business and marketing decisions (GPS) (MKAM_D2009-4)
\end{itemize}

E - Pricing Products and Services
\begin{itemize}
\item utilize pricing strategies to maximize return and meet customers’ perceptions of value (GPS) (MKAM_E2009-5)
\end{itemize}

F - Examining Marketing and Business
\begin{itemize}
\item examine marketing activities and related legal considerations to facilitate business development and growth (GPS) (MKAM_F2009-6)
\end{itemize}

G - Developing Product/Service Planning Skills
\begin{itemize}
\item obtain, develop, maintain, and improve a product/service mix to respond to marketing opportunities (GPS) (MKAM_G2009-7)
\end{itemize}

H - Purchasing Products and Services
\begin{itemize}
\item utilize purchasing and pricing strategies to maximize return and meet customers’ perceptions of value (GPS) (MKAM_H2009-8)
\end{itemize}

I - Selling Products and Services
\begin{itemize}
\item utilize sales knowledge and skills to determine client needs and wants and to respond through planned, personalized marketing communications (GPS) (MKAM_I2009-9)
\end{itemize}

J - Promoting Products and Services
\begin{itemize}
\item utilize promotional knowledge and skills for communication information to achieve a desired marketing outcome (GPS) (MKAM_J2009-10)
\end{itemize}
K - Enhancing Communication Skills

- utilize communication skills and technology tools to facilitate information flow in marketing, sales, and service (GPS) (MKAM_K2009-11)

L - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKAM_L2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKAM_L2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKAM_L2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKAM_L2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKAM_L2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKAM_L2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKAM_L2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKAM_L2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKAM_L2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKAM_L2012-10)
- write arguments focused on discipline-specific content (CCGPS) (MKAM_L2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKAM_L2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKAM_L2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKAM_L2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKAM_L2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKAM_L2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKAM_L2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKAM_L2012-18)
- 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 (CCGPS) (MKAM_L2012-19)
ADVANCED SPORTS AND ENTERTAINMENT MARKETING

A - Sports and Entertainment Industry
• evaluate the significance and components of sports and entertainment marketing as a viable industry (GPS) (MKSM_A2009-1)

B - Sports and Entertainment Management
• analyze the importance of planning, organizing, implementing, and controlling sports and entertainment events (GPS) (MKSM_B2009-2)
• construct a strategic management plan (GPS) (MKSM_B2009-3)
• examine operations management and control as they apply to sports and entertainment marketing (GPS) (MKSM_B2009-4)
• describe the importance of organizing and staffing for sports and entertainment events (GPS) (MKSM_B2009-5)
• dissect the decision-making process and analyze several forms of decision-making (GPS) (MKSM_B2009-6)

C - Sports and Entertainment Law
• describe the legal and ethical behaviors as they relate to the sports and entertainment marketing field (GPS) (MKSM_C2009-7)

D - College Sports, Amateur Sports, and Professional Sports
• evaluate the management functions necessary for college, amateur, and professional sports (GPS) (MKSM_D2009-8)

E - Promotions, Advertising, Public Relations, and Publicity
• examine the role of sales promotion and advertising as promotional tools in sports and entertainment marketing (GPS) (MKSM_E2009-9)
• examine the role of public relations and publicity as a promotional tool in sports and entertainment marketing (GPS) (MKSM_E2009-10)

F - Market Research
• implement strategies needed to collect, organize, process, transmit, and communicate research information (GPS) (MKSM_F2009-11)

G - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKSM_G2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKSM_G2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKSM_G2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKSM_G2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKSM_G2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKSM_G2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKSM_G2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKSM_G2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKSM_G2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKSM_G2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKSM_G2012-11)
G - Literacy Standards (continued)

- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKSM_G2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKSM_G2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKSM_G2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKSM_G2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKSM_G2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKSM_G2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKSM_G2012-18)
- 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 (CCGPS) (MKSM_G2012-19)

DISCOVERING HOSPITALITY AND TOURISM MARKETING

A - Overview of the Hospitality, Travel, and Tourism Industries

- discuss the hospitality, travel, and tourism industry in relation to historical developments/changes, broad segments of the markets, and various motivations for travel (GPS) (MKHT_A2009-1)

B - Tourism

- examine the varied aspects of tourism by determining their impact on the economy, the importance of successful positioning in the target consumers’ minds, and the competitive nature of the industry (GPS) (MKHT_B2009-2)
- discuss the relationship of geography to climates, major destinations, travel issues and concerns, and upcoming trends in destination hotspots (GPS) (MKHT_B2009-3)

C - Elements of Hospitality, Travel, and Tourism Marketing

- examine the lodging component of the hospitality industry and how companies market that component in order to achieve the goals and objectives of the facility (GPS) (MKHT_C2009-4)
- examine food and beverage options in the hospitality industry (GPS) (MKHT_C2009-5)
- analyze the transportation options and modes of travel available to facilitate travel to various destinations, including modes of travel as a destination, such as the cruise, air, and rail industries (GPS) (MKHT_C2009-6)
- describe the importance of human relations, communications, and ethical conduct in relation to hospitality and travel and the overall tourism industry (GPS) (MKHT_C2009-7)
- describe the importance of convention and meeting planning as a vital part of successful travel and hospitality operations (GPS) (MKHT_C2009-8)
- evaluate the role of travel agencies in the hospitality, travel, and tourism industry (GPS) (MKHT_C2009-9)

D - Technology Integration in the Hospitality, Travel, and Tourism Industries

- examine the impact of technology on the hospitality, travel, and tourism industries (GPS) (MKHT_D2009-10)
Marketing

E - Economic Impact of the Hospitality, Travel, and Tourism Industries on Domestic and Foreign Markets
• evaluate the economic impact of the hospitality, travel, and tourism industries on the international, national, state, and local economies (GPS) (MKHT_E2009-11)

F - Marketing and Business Fundamentals in the Hospitality, Travel, and Tourism Industries
• explore the application of marketing and business fundamentals as they apply to the hospitality, travel, and tourism industries (GPS) (MKHT_F2009-12)

G - Careers
• explore career paths within the hospitality, travel, and tourism industries (GPS) (MKHT_G2009-13)

H - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKHT_H2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKHT_H2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKHT_H2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKHT_H2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKHT_H2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKHT_H2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKHT_H2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKHT_H2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKHT_H2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKHT_H2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKHT_H2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKHT_H2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKHT_H2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKHT_H2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKHT_H2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKHT_H2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKHT_H2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKHT_H2012-18)
F - Literacy Standards (continued)
• 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 (CCGPS) (MKHT_H2012-19)

E-MARKETING

• analyze how the Internet has influenced modern day business and industry (GPS) (MKEM_A2009-1)
• explore the nature of e-marketing (GPS) (MKEM_A2009-2)

B - Business Issues Involved in E-Marketing
• evaluate e-marketing web sites for user-friendliness (GPS) (MKEM_B2009-3)
• evaluate the legal and ethical issues affecting e-marketing (GPS) (MKEM_B2009-4)

C - Marketing in a Digital World
• analyze the role of e-marketing in the marketing mix (GPS) (MKEM_C2009-5)
• explore how market research is conducted in e-marketing (GPS) (MKEM_C2009-6)
• create an ad campaign for a web site launch (GPS) (MKEM_C2009-7)
• analyze distribution methods for e-marketing (GPS) (MKEM_C2009-8)

D - Web Site Development
• explore professional design and web site development from a marketing perspective (GPS) (MKEM_D2009-9)
• analyze revenue generation in e-marketing (GPS) (MKEM_D2009-10)
• evaluate the impact globalization has on e-marketing (GPS) (MKEM_D2009-11)

E - You and E-Commerce
• explore e-marketing careers (GPS) (MKEM_E2009-12)

F - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKEM_F2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKEM_F2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKEM_F2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKEM_F2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKEM_F2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKEM_F2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKEM_F2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKEM_F2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKEM_F2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKEM_F2012-10)
F - Literacy Standards (continued)
- write arguments focused on discipline-specific content (CCGPS) (MKEM_F2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKEM_F2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKEM_F2012-13)
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- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKEM_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKEM_F2012-18)
- 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 (CCGPS) (MKEM_F2012-19)

ENTREPRENEURSHIP: BUILDING A BUSINESS

A - Fundamentals of Entrepreneurship and Business Ownership
- discuss concepts and processes associated with successful entrepreneurial performance (MKBB_A2009-1)
- explain the fundamental concepts of business ownership (MKBB_A2009-2)

B - Elements of a Business Plan
- identify components necessary to determine market segment / target market (MKBB_B2009-3)
- compile a business plan worksheet (MKBB_B2009-4)
- determine the effect of government on business (MKBB_B2009-5)
- identify the ethical, social, and environmental responsibilities of businesses (MKBB_B2009-6)

C - Elements of a Financial Plan
- describe the processes, strategies, and systems needed to guide the financial organization of an entrepreneurial entity (MKBB_C2009-7)

D - Elements of a Marketing Plan
- describe the concepts, systems, and tools needed to meet the goals and objectives of an entrepreneurial entity (MKBB_D2009-8)

E - Human Resources
- describe the concepts, systems, and strategies needed to acquire and develop human resource needs for an entrepreneurial entity (MKBB_E2009-9)

F - Formal Business Plan
- describe the concepts, strategies, and systems needed to implement and obtain support for an entrepreneurial entity (MKBB_F2009-10)
Marketing

G - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKBB_G2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKBB_G2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKBB_G2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKBB_G2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKBB_G2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKBB_G2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKBB_G2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKBB_G2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKBB_G2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKBB_G2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKBB_G2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKBB_G2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKBB_G2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKBB_G2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKBB_G2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKBB_G2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKBB_G2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKBB_G2012-18)
• 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 (CCGPS) (MKBB_G2012-19)

HOSPITALITY AND TOURISM MANAGEMENT

A - Overview of the Significance of Hospitality, Travel, and Tourism Marketing
• describe the social, environmental, economic, and consumer factors that impact the tourism and hospitality industry (GPS) (MKTM_A2009-1)
B - Impact of International Hospitality, Travel, and Tourism
- investigate the international hospitality market based on legal guidelines, customs, and current trends associated with travel abroad (GPS) (MKTM_B2009-2)

C - Hospitality Management
- describe the leadership and management skills needed by upwardly mobile employees in successful hotel/lodging facilities (GPS) (MKTM_C2009-3)
- investigate the importance of marketing principles to effective management and leadership in the hospitality industry (GPS) (MKTM_C2009-4)
- analyze the control systems used in food and beverage operations in the hospitality industry (GPS) (MKTM_C2009-5)
- explore the essential functions of human resources in the hospitality industry (GPS) (MKTM_C2009-6)
- evaluate event and convention opportunities in the hospitality industry (GPS) (MKTM_C2009-7)
- interpret the overall importance of sales and the management of sales activities in the hospitality industry (GPS) (MKTM_C2009-8)
- describe legal and liability issues in order to process and evaluate appropriate responses in the hospitality industry (GPS) (MKTM_C2009-9)

D - Tourism Management
- describe current and emerging trends in the tourism industry (GPS) (MKTM_D2009-10)
- analyze the importance of membership in professional organizations and associations representative of the hospitality industry (GPS) (MKTM_D2009-11)

E - Technology in the Hospitality and Travel Industry
- examine the elements of technology used in the hospitality industry (GPS) (MKTM_E2009-12)

F - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKTM_F2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKTM_F2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKTM_F2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKTM_F2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKTM_F2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKTM_F2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKTM_F2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKTM_F2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKTM_F2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKTM_F2012-10)
- write arguments focused on discipline-specific content (CCGPS) (MKTM_F2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKTM_F2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKTM_F2012-13)
F - Literacy Standards (continued)

- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKTM_F2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKTM_F2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKTM_F2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKTM_F2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKTM_F2012-18)
- 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 (CCGPS) (MKTM_F2012-19)

INTERNATIONAL BUSINESS AND MARKETING

A - Fundamentals of International Business and Marketing

- describe the fundamental concepts of international business and marketing (GPS) (MKIB_A2009-1)
- analyze various factors and influences affecting the international business movement (GPS) (MKIB_A2009-2)

B - Technology and Ethics Affecting International Business and Marketing

- apply appropriate informational technology and communication strategies for international business and marketing situations (GPS) (MKIB_B2009-3)
- analyze the importance of ethical business operations in an international business environment (GPS) (MKIB_B2009-4)

C - Organizational Structures in the International Business Environment

- describe the characteristics of various organizational structures in the international business environment (GPS) (MKIB_C2009-5)

D - International Marketing Functions

- describe the importance of market research, product development, and pricing strategies in successful international marketing strategies (GPS) (MKIB_D2009-6)
- evaluate effective methods of professional sales and promotional activities in the international business and marketing environment (GPS) (MKIB_D2009-7)
- analyze channels of distribution and appropriate logistics required to successfully complete an international business transaction (GPS) (MKIB_D2009-8)

E - Finance, Risk Management and Management Functions

- explain the impact of foreign exchange rates, international finance issues, and risk management techniques on international business operations (GPS) (MKIB_E2009-9)
- analyze various management theories and concepts in an international business and marketing setting and the effects of the theories and concepts on human resources and overall business operations (GPS) (MKIB_E2009-10)

F - Careers in International Business and Marketing

- identify potential career opportunities in international business and marketing and appropriate career path credentials (GPS) (MKIB_F2009-11)
G - Literacy Standards

• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any
gaps or inconsistencies in the account (CCGPS) (MKIB_G2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by
paraphrasing them in simpler but still accurate terms (CCGPS) (MKIB_G2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations
in the text (CCGPS) (MKIB_G2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical
context relevant to grade-level texts and topics (CCGPS) (MKIB_G2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the
information or ideas (CCGPS) (MKIB_G2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying
important issues that remain unresolved (CCGPS) (MKIB_G2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,
multimedia) in order to address a question or solve a problem (CCGPS) (MKIB_G2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or
challenging conclusions with other sources of information (CCGPS) (MKIB_G2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process,
phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKIB_G2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKIB_G2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKIB_G2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKIB_G2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and
audience (CCGPS) (MKIB_G2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on
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• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to
ongoing feedback, including new arguments or information (CCGPS) (MKIB_G2012-15)
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problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating
understanding of the subject under investigation (CCGPS) (MKIB_G2012-16)
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strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text
selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format
for citation (CCGPS) (MKIB_G2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKIB_G2012-18)
• 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 (CCGPS) (MKIB_G2012-19)

INTRODUCTION TO FASHION MARKETING

A - Introduction to the Fashion Industry

• explore the nature of fashion (GPS) (MKIF_A2009-1)
• explore the history of fashion (GPS) (MKIF_A2009-2)
• analyze trends in the fashion industry (GPS) (MKIF_A2009-3)
• analyze design, color, and textiles (GPS) (MKIF_A2009-4)
B - Marketing Concepts in the Fashion Industry
• define the marketing concepts used in the fashion industry (GPS) (MKIF_B2009-5)
• examine the impact of distribution markets on the fashion industry (GPS) (MKIF_B2009-6)
• develop a fashion promotion utilizing the promotional mix (GPS) (MKIF_B2009-7)
• explore fashion retailing and market centers (GPS) (MKIF_B2009-8)

C - Use of Technology and Research in the Fashion Industry
• explore the impact of technology on the fashion industry (GPS) (MKIF_C2009-9)
• analyze the impact of marketing research as it relates to the fashion industry (GPS) (MKIF_C2009-10)

D - Fashion Career Opportunities
• identify career opportunities in the fashion industry and appropriate career path credentials (GPS) (MKIF_D2009-11)

E - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKIF_E2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKIF_E2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKIF_E2012-3)
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• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKIF_E2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKIF_E2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKIF_E2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKIF_E2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKIF_E2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKIF_E2012-10)
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• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKIF_E2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKIF_E2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKIF_E2012-18)
E - Literacy Standards (continued)
- 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 (CCGPS) (MKIF_E2012-19)

INTRODUCTION TO SPORTS AND ENTERTAINMENT MARKETING

A - Introduction to the Sports and Entertainment Marketing Industry
- describe marketing concepts as they apply to sports and entertainment marketing (GPS) (MKSE_A2009-1)
- apply concepts and processes associated with successful financial planning in sports and entertainment marketing (GPS) (MKSE_A2009-2)

B - Sports and Entertainment Marketing Industries
- discuss the components of the sports marketing industry (GPS) (MKSE_B2009-3)
- analyze the field of marketing as it relates to the elements of the entertainment industry (e.g., television, radio, music, movie, theater, and fine arts) (GPS) (MKSE_B2009-4)

C - Selling and Promotion
- describe the elements of the selling process as they relate to sports and entertainment marketing (GPS) (MKSE_C2009-5)
- explain the elements of promotion (e.g., sales promotion, advertising, personal selling, public relations, and publicity) (GPS) (MKSE_C2009-6)

D - Risk Management and Sports Entertainment Law
- examine the elements of risk associated with the industry of sports and entertainment marketing (GPS) (MKSE_D2009-7)
- explain legal and ethical behaviors as they relate to the sports and entertainment marketing field (GPS) (MKSE_D2009-8)
- apply communication and presentation skills into sports and entertainment activities (GPS) (MKSE_D2009-9)

E - Distribution
- explain appropriate and efficient channels of distribution for sports and entertainment events (GPS) (MKSE_E2009-10)

F - Careers in Sports and Entertainment Marketing
- investigate career choices in sports and entertainment marketing (GPS) (MKSE_F2009-11)

G - Marketing Plan
- create a sports and entertainment marketing plan (GPS) (MKSE_G2009-12)

H - Literacy Standards
- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKSE_H2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKSE_H2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKSE_H2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKSE_H2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKSE_H2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKSE_H2012-6)
H - Literacy Standards (continued)

- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKSE_H2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKSE_H2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKSE_H2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKSE_H2012-10)
- write arguments focused on discipline-specific content (CCGPS) (MKSE_H2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKSE_H2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKSE_H2012-13)
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- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKSE_H2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKSE_H2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKSE_H2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKSE_H2012-18)
- 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 (CCGPS) (MKSE_H2012-19)

MARKETING PRINCIPLES

A - Foundational Knowledge

- examine marketing principles in relation to the free enterprise system and the global environment (GPS) (MKMP_A2009-1)

B - Economics in Marketing

- integrate social studies skills into marketing, sales, and service to obtain an understanding of customers and the economic environment in which they function (GPS) (MKMP_B2009-2)

C - Marketing Concepts

- apply foundational knowledge of marketing concepts to understand the scope and impact of marketing on the economy (GPS) (MKMP_C2009-3)

D - Marketing and Business

- implement, modify, and improve business and marketing systems to facilitate business activities (GPS) (MKMP_D2009-4)

E - International Business/Marketing

- apply foundational knowledge of international business and marketing concepts to understand the scope and impact on the economy (GPS) (MKMP_E2009-5)
F - Distribution and Logistics
• utilize distribution knowledge to manage supply-chain activities (GPS) (MKMP_F2009-6)

G - Finance in Marketing
• employ financial knowledge and skills to facilitate marketing decisions (GPS) (MKMP_G2009-7)

H - Marketing Research
• apply foundational knowledge of marketing information and research to understand its scope on business and marketing decisions (GPS) (MKMP_H2009-8)

I - Product and Service Pricing
• utilize strategies to maximize return and meet customers’ perception of value (GPS) (MKMP_I2009-9)

J - Product / Service Development and Planning
• employ processes and techniques to develop, maintain, and improve a product/service mix to utilize market opportunities (GPS) (MKMP_J2009-10)

K - Product and Service Selling
• employ processes and techniques to sell goods, services, and ideas (GPS) (MKMP_K2009-11)

L - Product and Service Promotion
• utilize promotional knowledge and skill for communicating information to achieve a desired marketing outcome (GPS) (MKMP_L2009-12)

M - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKMP_M2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKMP_M2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKMP_M2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKMP_M2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKMP_M2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKMP_M2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKMP_M2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKMP_M2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKMP_M2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKMP_M2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKMP_M2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKMP_M2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKMP_M2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKMP_M2012-14)
M - Literacy Standards (continued)

- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKMP_M2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKMP_M2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKMP_M2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKMP_M2012-18)
- 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 (CCGPS) (MKMP_M2012-19)

MARKETING RESEARCH

A - Critical Elements of Marketing Research

- analyze the impact of marketing research in business and industry (GPS) (MKMR_A2009-1)
- describe primary and secondary research (GPS) (MKMR_A2009-2)
- categorize stages in the marketing research process (GPS) (MKMR_A2009-3)
- identify demographic information in order to define a target market (GPS) (MKMR_A2009-4)
- construct sampling designs in the marketing research process (GPS) (MKMR_A2009-5)
- organize and sort data to create a visual representation of information (GPS) (MKMR_A2009-6)
- identify elements of survey techniques in order to create primary research instruments (GPS) (MKMR_A2009-7)
- plan a research design and implement data collection (GPS) (MKMR_A2009-8)
- evaluate organizational and ethical issues of the marketing research process (GPS) (MKMR_A2009-9)
- identify potential career opportunities in marketing research and appropriate career path credentials (GPS) (MKMR_A2009-10)

B - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKMR_B2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKMR_B2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKMR_B2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKMR_B2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKMR_B2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKMR_B2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKMR_B2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKMR_B2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKMR_B2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKMR_B2012-10)
B - Literacy Standards (continued)
• write arguments focused on discipline-specific content (CCGPS) (MKMR_B2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKMR_B2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKMR_B2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKMR_B2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKMR_B2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKMR_B2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKMR_B2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKMR_B2012-18)
• 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 (CCGPS) (MKMR_B2012-19)

PROFESSIONAL SALES AND PROMOTION

A - Scope of Promotion and Advertising
• analyze the scope of the advertising and promotion industry (GPS) (MKSP_A2009-1)

B - Role of the Promotional Mix
• discuss the role of the promotional mix in a competitive economic environment (GPS) (MKSP_B2009-2)

C - Analyzing Potential Markets
• demonstrate techniques used to analyze the potential market (GPS) (MKSP_C2009-3)

D - Regulations and Ethics
• discuss regulations and ethics in promotion (GPS) (MKSP_D2009-4)

E - Media Cost and the Steps in Planning an Advertising Campaign
• discuss the steps in planning for advertising campaigns (GPS) (MKSP_E2009-5)
• calculate media costs that affect the elements of the promotional mix (GPS) (MKSP_E2009-6)

F - Promotional Plan
• demonstrate advertising techniques used in a promotion plan (GPS) (MKSP_F2009-7)
• develop public relations media (GPS) (MKSP_F2009-8)
• develop visual merchandising to compliment advertising campaigns (GPS) (MKSP_F2009-9)

G - Selling and the Economy
• identify the importance of selling to the economy (GPS) (MKSP_G2009-10)

H - Sales Promotion Design
• design sales promotion materials (GPS) (MKSP_H2009-11)
I - Sales Presentations and Follow Up
• analyze and apply the steps needed for an effective sales presentation (GPS) (MKSP_I2009-12)
• describe the importance of utilizing follow-up techniques after the sale has been completed (GPS) (MKSP_I2009-13)

J - Professional Sales and Promotion Career Opportunities
• identify potential career opportunities in professional sales and promotion with appropriate career path credentials (GPS) (MKSP_J2009-14)

K - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (MKSP_K2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (MKSP_K2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (MKSP_K2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (MKSP_K2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (MKSP_K2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (MKSP_K2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (MKSP_K2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (MKSP_K2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (MKSP_K2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (MKSP_K2012-10)
• write arguments focused on discipline-specific content (CCGPS) (MKSP_K2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (MKSP_K2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (MKSP_K2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (MKSP_K2012-14)
• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (MKSP_K2012-15)
• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (MKSP_K2012-16)
• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (MKSP_K2012-17)
• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (MKSP_K2012-18)
• 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 (CCGPS) (MKSP_K2012-19)
Library Science I-IV

A - Classification and Location
- demonstrate an understanding of the Dewey Decimal classification system (ELLS_A1998-1)
- identify and locate fiction, nonfiction, biography, reference, periodicals, and special collections in the media center (ELLS_A1998-2)
- identify and locate various formats of media in the media center (such as video recordings, laser disks) (ELLS_A1998-3)

B - Operational Procedures
- define terminology pertaining to the media center (ELLS_B1998-4)
- identify policies and procedures of the media center (ELLS_B1998-5)
- circulate media center resources and equipment (ELLS_B1998-6)
- demonstrate the use of selected media equipment (such as laser disk player, camcorder) (ELLS_B1998-7)

C - Information Access and Use
- demonstrate a working knowledge of media center databases and indexes (ELLS_C1998-9)
- demonstrate an understanding of basic search strategies (e.g., Boolean) (ELLS_C1998-10)
- assist students, staff, and teachers in locating information (ELLS_C1998-11)

D - Application
- demonstrate the system for shelving media center materials (ELLS_D2005-1)
- demonstrate the system for processing periodicals (ELLS_D2005-2)
- demonstrate the system for processing new media center materials (ELLS_D2005-3)
- locate media materials using the online catalog (ELLS_D2005-4)
- locate information using available online resources (e.g., GALILEO) (ELLS_D2005-5)
- demonstrate the use of media management software (ELLS_D2005-6)
LATIN I

A - Communication
• read authentic and edited passages appropriate for Latin I (GPS) (CLL1_A2009-1)
• comprehend spoken Latin phrases, quotations, and expressions (GPS) (CLL1_A2009-2)
• provide accurate, written English translations (GPS) (CLL1_A2009-3)
• write simple phrases and sentences in Latin as part of the process for understanding written Latin (GPS) (CLL1_A2009-4)
• read passages aloud with proper intonation and rhythm (GPS) (CLL1_A2009-5)

B - Culture
• demonstrate an understanding of perspectives, practices, and products of the Greco-Roman culture (GPS) (CLL1_B2009-6)
• interpret cultural practices of the Romans (GPS) (CLL1_B2009-7)

C - Connections, Comparisons, and Communities
• reinforce and further the knowledge of other disciplines through the study of Latin (GPS) (CLL1_C2009-8)
• acquire information and recognize distinctive viewpoints via the study of Latin and the Greco-Roman civilization (GPS) (CLL1_C2009-9)
• identify situations and resources in which Latin skills and cultural knowledge may be applied beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (CLL1_C2009-10)

LATIN II

A - Communication
• read and translate passages, edited and authentic, containing grammar and syntax appropriate for Latin II (GPS) (CLL2_A2009-1)
• comprehend spoken Latin phrases, quotations, and expressions (GPS) (CLL2_A2009-2)
• provide accurately written translations by applying more complex concepts and specialized vocabulary appropriate for Latin II (GPS) (CLL2_A2009-3)
• write increasingly complex phrases and sentences in Latin as a part of the process for understanding written Latin (GPS) (CLL2_A2009-4)
• read Latin passages aloud with accurate pronunciation, proper intonation, and rhythm (GPS) (CLL2_A2009-5)

B - Culture
• discuss the perspectives, practices, and products of the Greco-Roman culture (GPS) (CLL2_B2009-6)
• identify contributions of the Roman culture (GPS) (CLL2_B2009-7)

C - Connections, Comparisons, and Communities
• use information acquired through the study of Latin to correlate with other subject areas (GPS) (CLL2_C2009-8)
• recognize and use elements of Latin to increase knowledge of English (GPS) (CLL2_C2009-9)
• acquire information from reading passages in order to draw connections between modern and classical civilizations (GPS) (CLL2_C2009-10)
• improve language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (CLL2_C2009-11)
LATIN III, IV, V, AND HIGHER

A - Communication
- read authentic passages with supporting notes and commentary appropriate for Advanced Latin (GPS) (CLL3_A2009-1)
- comprehend spoken Latin phrases, quotations, and expressions (GPS) (CLL3_A2009-2)
- read Latin passages aloud with accurate pronunciation, proper intonation, and rhythm (GPS) (CLL3_A2009-3)
- demonstrate mastery of advanced grammar topics and rhetorical/poetic devices (GPS) (CLL3_A2009-4)

B - Culture
- describe and discuss the perspectives, practices, and products of Roman culture (GPS) (CLL3_B2009-5)
- analyze the contributions of Roman culture to other civilizations (GPS) (CLL3_B2009-6)

C - Connections, Comparisons, and Communities
- read passages in order to compare and contrast contemporary culture with the Roman world (GPS) (CLL3_C2009-7)
- reinforce and expand the knowledge of other disciplines through the study of the Latin language (GPS) (CLL3_C2009-8)
- use elements of the Latin language and literature to gain added knowledge of English (GPS) (CLL3_C2009-9)
- improve language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (CLL3_C2009-10)

MODERN LANGUAGES LEVEL I

Note: The student in Modern Languages Level I (French, German, Spanish) will learn to communicate in oral and written forms at the novice level by developing the following skills.

A - Communication: Interpersonal Mode
- exchange simple spoken and written information in the target language (GPS) (MLL1_A2009-1)
- conduct brief oral and written exchanges in the target language (GPS) (MLL1_A2009-2)

B - Communication: Interpretive Mode
- demonstrate understanding of simple spoken and written language presented through a variety of media in the target language, based on a variety of topics (GPS) (MLL1_B2009-3)
- interpret verbal and nonverbal cues to understand simple spoken and written messages in the target language (GPS) (MLL1_B2009-4)

C - Communication: Presentational Mode
- present information orally and in writing containing a variety of vocabulary, phrases, and patterns (GPS) (MLL1_C2009-5)
- present briefly rehearsed material in the target language (GPS) (MLL1_C2009-6)

D - Culture
- identify perspectives, practices, and products of the culture(s) where the target language is spoken (GPS) (MLL1_D2009-7)

E - Connections, Comparisons, and Communities
- use information acquired in the study of the target language and information acquired in other subject areas to reinforce one another (GPS) (MLL1_E2009-8)
- discuss the significance of culture through comparisons of the culture(s) studied and the students' own culture (GPS) (MLL1_E2009-9)
- compare basic elements of the target language to the English language (GPS) (MLL1_E2009-10)
- recognize current events in the target culture(s) (GPS) (MLL1_E2009-11)
E - Connections, Comparisons, and Communities (continued)
• identify situations and resources in which target language skills and cultural knowledge may be applied beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL1_E2009-12)

MODERN LANGUAGES LEVEL II

Note: The student in Modern Languages Level II (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the novice to intermediate-low levels by developing the following skills.

A - Communication: Interpersonal Mode
• exchange oral and written information in the target language (GPS) (MLL2_A2009-1)
• conduct oral and written exchanges in the target language (GPS) (MLL2_A2009-2)

B - Communication: Interpretive Mode
• demonstrate understanding of spoken and written language on new and familiar topics presented through a variety of media in the target language, including authentic materials (GPS) (MLL2_B2009-3)
• interpret verbal and nonverbal cues to understand spoken and written messages in the target language (GPS) (MLL2_B2009-4)

C - Communication: Presentational Mode
• present information orally and in writing using familiar and newly acquired vocabulary, phrases, and patterns (GPS) (MLL2_C2009-5)
• present rehearsed and unrehearsed material in the target language, such as skits, poems, short narratives, and songs (GPS) (MLL2_C2009-6)

D - Culture
• identify perspectives, practices, and products of the culture(s) where the target language is spoken and how they are interrelated (GPS) (MLL2_D2009-7)

E - Connections, Comparisons, and Communities
• use information acquired in the study of the target language to reinforce and correlate with other subject areas (GPS) (MLL2_E2009-8)
• discuss similarities and differences between the culture(s) studied and the students’ own culture (GPS) (MLL2_E2009-9)
• recognize and use elements of the target language to increase knowledge of English (GPS) (MLL2_E2009-10)
• identify current events and issues in the target culture(s) (GPS) (MLL2_E2009-11)
• develop and apply target language skills and cultural knowledge beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL2_E2009-12)

MODERN LANGUAGES LEVEL III

Note: The student in Modern Languages Level III (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the novice-high to intermediate-mid levels by developing the following skills.

A - Communication: Interpersonal Mode
• exchange (with some originality and spontaneity) oral and written information and ideas in the target language (GPS) (MLL3_A2009-1)
• initiate, sustain, and close oral and written exchanges in the target language, applying familiar vocabulary and structures to new situations (GPS) (MLL3_A2009-2)
B - Communication: Interpretive Mode
• demonstrate understanding of spoken and written language on new and familiar topics presented through a variety of media in the target language, including authentic materials (GPS) (MLL3_B2009-3)
• interpret verbal and nonverbal cues to understand more complex spoken and written messages in the target language (GPS) (MLL3_B2009-4)

C - Communication: Presentational Mode
• present information orally and in writing using familiar and newly acquired vocabulary, phrases, and patterns in increasingly complex sentences (GPS) (MLL3_C2009-5)
• present student-created as well as culturally authentic material in the target language (GPS) (MLL3_C2009-6)

D - Culture
• discuss perspectives, practices, and products of the culture(s) studied and how they are interrelated (GPS) (MLL3_D2009-7)

E - Connections, Comparisons, and Communities
• reinforce and broaden knowledge of connections between the target language and other disciplines (GPS) (MLL3_E2009-8)
• analyze similarities and differences that exist within and among the culture(s) studied (GPS) (MLL3_E2009-9)
• strengthen knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLL3_E2009-10)
• discuss current events and issues in the target culture(s) (GPS) (MLL3_E2009-11)
• improve language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL3_E2009-12)

MODERN LANGUAGES LEVEL IV

Note: The student in Modern Languages Level IV (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the intermediate level by developing the following skills.

A - Communication: Interpersonal Mode
• exchange a variety of oral and written information and ideas in the target language related to history, literature, contemporary events, and issues (GPS) (MLL4_A2009-1)
• initiate, sustain, and close oral and written exchanges in the target language, applying familiar vocabulary and structures to new situations (GPS) (MLL4_A2009-2)

B - Communication: Interpretive Mode
• demonstrate understanding of spoken and written language on new and familiar topics presented through a variety of media in the target language, including authentic materials (GPS) (MLL4_B2009-3)
• interpret verbal and nonverbal cues to understand increasingly complex spoken and written messages in the target language (GPS) (MLL4_B2009-4)

C - Communication: Presentational Mode
• present information orally and in writing, using familiar and newly acquired vocabulary, phrases, and patterns in increasingly complex sentences (GPS) (MLL4_C2009-5)
• present student-created as well as culturally authentic material in the target language (GPS) (MLL4_C2009-6)

D - Culture
• describe and discuss in the target language perspectives, practices, and products of the culture(s) studied and how they are interrelated (GPS) (MLL4_D2009-7)
E - Connections, Comparisons, and Communities
• reinforce and broaden knowledge of the connections between the target language and other subject areas (GPS) (MLL4_E2009-8)
• analyze the similarities and differences that exist within and among the culture(s) studied (GPS) (MLL4_E2009-9)
• expand knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLL4_E2009-10)
• apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL4_E2009-11)

MODERN LANGUAGES LEVEL V

Note: The student in Modern Languages Level V (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the intermediate level by developing the following skills.

A - Communication: Interpersonal Mode
• exchange oral and written information and ideas in the target language on topics related to contemporary events, history, and literature (GPS) (MLL5_A2009-1)
• combine and extend known elements and conversational input to create sentences (GPS) (MLL5_A2009-2)

B - Communication: Interpretive Mode
• demonstrate comprehension of more complex spoken and written language on topics related to contemporary, historical, and literary events and issues presented through a variety of media in the target language, including authentic materials (GPS) (MLL5_B2009-3)
• interpret verbal and nonverbal cues to understand more complex spoken and written messages in the target language (GPS) (MLL5_B2009-4)

C - Communication: Presentational Mode
• present previously learned as well as newly acquired information on topics related to contemporary, historical, and literary events and issues using cultural references where appropriate, in increasingly complex sentences (GPS) (MLL5_C2009-5)
• present student-created as well as culturally authentic stories, poems, skits, and/or short plays in the target language (GPS) (MLL5_C2009-6)

D - Culture
• describe and discuss in the target language perspectives, practices, and products of the cultures studied and how they are interrelated (GPS) (MLL5_D2009-7)

E - Connections, Comparisons and Communities
• reinforce and broaden knowledge of the connections between the target language and other subject areas (GPS) (MLL5_E2009-8)
• analyze the similarities and differences that exist within and among the culture(s) studied (GPS) (MLL5_E2009-9)
• expand knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLL5_E2009-10)
• apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL5_E2009-11)
MODERN LANGUAGES LEVEL VI

Note: The student in Modern Languages Level VI (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the intermediate level and approach intermediate-high proficiency by developing the following skills.

A - Communication: Interpersonal Mode
• exchange oral and written information and ideas in the target language on topics related to contemporary events, cultural nuances, history, the arts, and literature (GPS) (MLL6_A2009-1)
• integrate and extend known elements and conversational input to create sentences and paragraphs (GPS) (MLL6_A2009-2)

B - Communication: Interpretive Mode
• demonstrate comprehension of increasingly complex spoken and written communication in the target language presented through a variety of media, including authentic materials (GPS) (MLL6_B2009-3)
• interpret verbal and nonverbal cues to understand increasingly complex spoken and written messages in the target language (GPS) (MLL6_B2009-4)

C - Communication: Presentational Mode
• synthesize vocabulary, phrases, and patterns in extended oral and written discourse (GPS) (MLL6_C2009-5)
• present student-created as well as culturally authentic stories, poems, skits, and/or short plays in the target language (GPS) (MLL6_C2009-6)

D - Culture
• describe and discuss in the target language perspectives, practices, and products of the culture(s) studied and how they are interrelated (GPS) (MLL6_D2009-7)

E - Connections, Comparisons, and Communities
• reinforce and broaden knowledge of connections between the target language and other subject areas (GPS) (MLL6_E2009-8)
• analyze the similarities and differences that exist within and among the culture(s) studied (GPS) (MLL6_E2009-9)
• expand knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLL6_E2009-10)
• apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL6_E2009-11)

MODERN LANGUAGES LEVEL VII

Note: The student in Modern Languages Level VII (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the intermediate level and approach intermediate-high proficiency by developing the following skills.

A - Communication: Interpersonal Mode
• exchange oral and written information and ideas in the target language on topics related to social and historical issues, political systems, the arts, and literature (GPS) (MLL7_A2009-1)
• apply vocabulary and other linguistic elements to produce original extended oral and written discourse (GPS) (MLL7_A2009-2)

B - Communication: Interpretive Mode
• demonstrate comprehension of increasingly complex spoken and written communication in the target language presented through a variety of media, including authentic materials (GPS) (MLL7_B2009-3)
• interpret verbal and nonverbal cues to understand increasingly complex spoken and written messages in the target language (GPS) (MLL7_B2009-4)
Modern and Classical Languages

C - Communication: Presentational Mode
• synthesize vocabulary, phrases, and patterns in extended oral and written discourse (GPS) (MLL7_C2009-5)
• present stories, poems, skits, short plays, and/or speeches in the target language (GPS) (MLL7_C2009-6)

D - Culture
• describe and discuss in the target language perspectives, practices, and products of the culture(s) studied and how they are interrelated (GPS) (MLL7_D2009-7)

E - Connections, Comparisons, and Communities
• reinforce and broaden knowledge of connections between the target language and other subject areas (GPS) (MLL7_E2009-8)
• evaluate the similarities and differences that exist within and among the culture(s) studied (GPS) (MLL7_E2009-9)
• expand knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLL7_E2009-10)
• apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL7_E2009-11)

MODERN LANGUAGES LEVEL VIII

Note: The student in Modern Languages Level VIII (French, German, Spanish) will expand his/her ability to communicate in oral and written forms at the intermediate level and approach intermediate-high proficiency by developing the following skills.

A - Communication: Interpersonal Mode
• exchange oral and written information and ideas in the target language on topics related to social, philosophical and historical issues, regionalisms, traditions, the arts, and literature (GPS) (MLL8_A2009-1)
• produce original extended oral and written discourse (GPS) (MLL8_A2009-2)

B - Communication: Interpretive Mode
• demonstrate comprehension of increasingly complex spoken and written communication in the target language presented through a variety of media, including authentic materials (GPS) (MLL8_B2009-3)
• interpret verbal and nonverbal cues to understand increasingly complex spoken and written messages in the target language (GPS) (MLL8_B2009-4)

C - Communication: Presentational Mode
• synthesize vocabulary, phrases, and patterns in extended oral and written discourse (GPS) (MLL8_C2009-5)
• present stories, poems, skits, short plays, and/or speeches in the target language (GPS) (MLL8_C2009-6)

D - Culture
• describe and discuss perspectives, practices, and products of the culture(s) studied and how they are interrelated (GPS) (MLL8_D2009-7)

E - Connections, Comparisons, and Communities
• expand knowledge of connections between the target language and other subject areas (GPS) (MLL8_E2009-8)
• evaluate the similarities and differences that exist within and among the culture(s) studied (GPS) (MLL8_E2009-9)
• expand knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLL8_E2009-10)
• apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLL8_E2009-11)
SPANISH FOR NATIVE SPEAKERS I

Note: The Spanish native speaker will improve his/her ability to communicate in oral and written forms at the advanced level and will increase his/her knowledge of Spanish and Hispanic cultures by developing the following skills.

A - Communication: Interpersonal Mode
• exchange oral and written information, with some originality, spontaneity, and detail (GPS) (MLS1_A2009-1)
• participate in oral and written exchange of information (GPS) (MLS1_A2009-2)

B - Communication: Interpretive Mode
• analyze information gathered from a variety of media in the target language (GPS) (MLS1_B2009-3)
• interpret verbal and nonverbal cues to understand spoken and written messages in the target language (GPS) (MLS1_B2009-4)

C - Communication: Presentational Mode
• present information orally and in writing on a variety of topics using increasingly complex discourse (GPS) (MLS1_C2009-5)
• present student-created as well as culturally authentic stories, poems, and/or skits (GPS) (MLS1_C2009-6)

D - Culture
• identify, describe, and discuss perspectives, practices, and products of Hispanic cultures and how they are interrelated (GPS) (MLS1_D2009-7)

E - Connections, Comparisons, and Communities
• reinforce and broaden knowledge of connections between Spanish and other subject areas (GPS) (MLS1_E2009-8)
• investigate the similarities that exist within and among Spanish-speaking cultures (GPS) (MLS1_E2009-9)
• expand knowledge of the English language through the study and analysis of linguistic elements of the target language (GPS) (MLS1_E2009-10)
• apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLS1_E2009-11)

SPANISH FOR NATIVE SPEAKERS II

Note: The level two Spanish native speaker will continue to improve his/her ability to communicate in oral and written forms at the advanced to advanced-high level and will increase his/her knowledge of Spanish, Hispanic, and Hispanic-American cultures by developing the following skills.

A - Communication: Interpersonal Mode
• provide increasingly detailed and extended information about a variety of topics related to contemporary events and issues, using cultural references where appropriate (GPS) (MLS2_A2009-1)
• participate in extended oral and written exchanges of information, applying increasingly accurate vocabulary and structures (GPS) (MLS2_A2009-2)

B - Communication: Interpretive Mode
• evaluate information gathered from a variety of media in the target language (GPS) (MLS2_B2009-3)
• interpret verbal and nonverbal cues to understand spoken and written messages in the target language (GPS) (MLS2_B2009-4)

C - Communication: Presentational Mode
• present information orally and in writing on a variety of topics using increasingly complex discourse (GPS) (MLS2_C2009-5)
• present student-created as well as culturally authentic stories, poems, and/or skits (GPS) (MLS2_C2009-6)
D - Culture
- identify, describe, and discuss perspectives, practices, and products of Hispanic cultures and how they are interrelated (GPS) (MLS2_D2009-7)

E - Connections, Comparisons, and Communities
- reinforce and broaden knowledge of connections between Spanish and other subject areas (GPS) (MLS2_E2009-8)
- evaluate information in order to understand similarities and differences that exist within and among Spanish-speaking cultures (GPS) (MLS2_E2009-9)
- expand knowledge of the English language through the study and analysis of the Spanish language (GPS) (MLS2_E2009-10)
- apply language skills and expand cultural understanding by accessing information beyond the classroom setting for recreational, educational, and occupational purposes (GPS) (MLS2_E2009-11)
PEER LEADERSHIP

A -
- describe the role, functions, and characteristics of a peer leader (QCC) (GCPL_A1998-2)
- adhere to established ground rules and the National Peer Helping Association ethical guidelines (GCPL_A1998-3)
- explore and apply the fundamental characteristics of facilitative relationships and communication skills (QCC) (GCPL_A1998-4)
- identify and demonstrate interpersonal skills necessary to maintain positive peer relationships (QCC) (GCPL_A1998-6)
- demonstrate an understanding of problem-solving and/or mediation techniques (QCC) (GCPL_A1998-7)
- identify methods of conflict/anger management (QCC) (GCPL_A1998-8)
- explore the concepts of prejudice and discrimination and their impact on peer relationships (QCC) (GCPL_A1998-9)
- identify elements of group interaction (QCC) (GCPL_A1998-10)
- utilize elements of successful group interactions by participating in a variety of roles within group settings (QCC) (GCPL_A1998-11)
- participate in assigned targeted groups within the school community (QCC) (GCPL_A1998-12)
- define positive and negative aspects of peer pressure (QCC) (GCPL_A1998-13)
- indicate a variety of alternatives to negative peer pressure (QCC) (GCPL_A1998-14)
- explore how personal responsibility relates to long- and short-range life and career goals (QCC) (GCPL_A1998-15)
- establish roles, responsibilities, and procedures related to peer tutoring including effective study habits, test-taking skills, and time management (QCC) (GCPL_A1998-16)
- demonstrate knowledge and skills of peer leadership intervention strategies in a variety of settings (GCPL_A1998-17)
- utilize knowledge and understanding gained through individual and/or group projects (GCPL_A1998-18)

PEER FACILITATION

A -
- adhere to the National Peer Helping Association’s ethical guidelines as well as to other established school and classroom ground rules (GCPF_A2002-1)
- explore effective practices for dealing with ethical dilemmas (GCPF_A2002-2)
- apply appropriate communication, facilitative, and social interaction skills when working with others (QCC) (GCPF_A2002-3)
- demonstrate methods for handling conflict and assist others to apply those methods to solve conflicts (QCC) (GCPF_A2002-4)
- participate in the peer mediation process (QCC) (GCPF_A2002-5)
- utilize the problem-solving model when working with others (QCC) (GCPF_A2002-6)
- cite short- and long-range, positive and negative consequences of alternatives and choices (QCC) (GCPF_A2002-7)
- identify and demonstrate the goal-setting process when working with students (QCC) (GCPF_A2002-8)
- describe the factors that influence motivation (QCC) (GCPF_A2002-9)
- explore personal values and prejudices which prevent working productively with others (QCC) (GCPF_A2002-10)
- give and utilize peer feedback and engage in the process of self-evaluation (QCC) (GCPF_A2002-11)
- organize and participate in activities to help individuals, classes, and schools (QCC) (GCPF_A2002-12)
- identify stages of the group process (GCPF_A2002-13)
- describe and apply effective practices for beginning, maintaining, and closing sessions in small group and classroom settings (GCPF_A2002-14)
- implement and design work with individuals, small and large group sessions, and/or group projects (QCC) (GCPF_A2002-15)
AERobic Exercise

A - Fitness
- assess health-related fitness determined by research-based standards (PEAE_A2009-1)
- match fitness activities with major muscles (PEAE_A2009-2)
- explain the benefits of maintaining good health and well-being through aerobic exercise (PEAE_A2009-3)
- explain the principles of training and conditioning appropriate to aerobic exercise (GPS) (PEAE_A2009-4)
- demonstrate ability to access and interpret fitness information (GPS) (PEAE_A2009-5)
- develop goals of maintenance or improvement for fitness (PEAE_A2009-6)

B - Skill and Technique
- demonstrate basic skills and critical elements essential to aerobic exercise (GPS) (PEAE_B2009-7)

C - Safety, Procedures and Etiquette
- demonstrate safety precautions for each selected mode of aerobic exercise needed for injury prevention (GPS) (PEAE_C2009-8)
- analyze how activity patterns change throughout life and explain modifications needed due to injury, illnesses, and aging (GPS) (PEAE_C2009-9)
- explain the effects of climate and environmental factors on selected modes of aerobic exercise (PEAE_C2009-10)
- display appropriate etiquette and ways of interacting in dance or other group settings (GPS) (PEAE_C2009-11)

Body sculpting

A - Training for Fitness
- demonstrate correct training methods used in weight training (PEBS_A2009-1)
- identify weight loads, number of sets, and repetitions in various weight training programs (PEBS_A2009-2)
- identify the types of exercises to be performed in order to enhance the development of various muscle groups (PEBS_A2009-3)
- develop and execute a series of exercises using machines and free weights to enhance a conditioning program (PEBS_A2009-4)
- identify the major muscle groups of the body (PEBS_A2009-5)
- explain the importance of performing large muscle group exercises prior to small or isolated muscle group movements (PEBS_A2009-6)
- describe the importance of determining the amount of rest needed between sets and training workout routines in order to maximize training (PEBS_A2009-7)
- describe the causes and effects of over-training (PEBS_A2009-8)
- identify and perform multiple aerobic conditioning exercises as part of an overall body sculpting program (PEBS_A2009-9)
- identify the benefits of aerobic exercise for general health and an overall body conditioning program (PEBS_A2009-10)
- assess health-related fitness determined by research-based standards (GPS) (PEBS_A2010-1)
- develop fitness goals that are gender, age, and skill appropriate (GPS) (PEBS_A2010-2)

B - Training Equipment and Aids
- demonstrate the proper use of two major types of weight training equipment: machines and free weights (PEBS_B2009-11)
- identify and demonstrate the proper use of dynabands, handheld weights, and other strength and conditioning apparatus (PEBS_B2009-12)
- identify and perform the proper strength and conditioning techniques using calisthenics and other exercises utilizing body weight (PEBS_B2009-13)
C - Program Organization and Technique
- demonstrate proper lifting technique when using a variety of strength and conditioning equipment (PEBS_C2009-14)
- describe the importance of the “warm-up” and “cool down” phases of a training program (PEBS_C2009-15)
- describe the importance of charting and record-keeping in a training and conditioning program (PEBS_C2009-16)

D - Nutrition, Rest and Ergogenic Aids
- identify the six nutrients and purpose of each (PEBS_D2009-17)
- identify the importance of nutrition as part of an overall conditioning and weight management program (PEBS_D2009-18)
- identify healthy concepts of weight management related to an overall conditioning program (PEBS_D2009-19)
- identify the harmful effects of drugs, including alcohol, tobacco, anabolic steroids, and dietary supplements on the body (PEBS_D2009-20)
- identify the need for rest as part of an overall conditioning and training program (PEBS_D2009-21)

GENERAL PHYSICAL EDUCATION

A - History
- discuss the origin and development of selected sports (PEGN_A2009-1)

B - Skill
- exhibit a level of competency, advancing to a level of proficiency, in a particular skill (PEGN_B2009-2)

C - Rules / Strategy
- apply rules and strategies of selected sports (PEGN_C2009-3)

D - Etiquette
- display appropriate etiquette and sportsmanship during participation (PEGN_D2009-4)

E - Equipment / Safety
- display appropriate care of equipment and personal safety (PEGN_E2009-5)

F - Fitness
- assess health-related fitness determined by research-based standards (GPS) (PEGN_F2010-1)
- participate regularly in physical activity (GPS) (PEGN_F2010-2)
- develop health-enhancing fitness goals that are age and skill appropriate (GPS) (PEGN_F2010-3)
- value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction (GPS) (PEGN_F2010-4)

INTRODUCTION TO LIFETIME FITNESS

A - Fitness
- demonstrate safety precautions during exercise for the prevention of injury (GPS) (PE09_A2009-1)
- explain the effects of weather and climate on exercise (PE09_A2009-2)
- explain the relationship between physical fitness and stress management (GPS) (PE09_A2009-3)
- demonstrate ability to assess personal level of fitness for all components of a health-related fitness assessment (GPS, CE) (PE09_A2009-4)
- develop goals and a plan of improvement or maintenance for all fitness components using results from a health-related fitness assessment (GPS, CE) (PE09_A2009-5)
- implement and evaluate self-designed fitness plan (GPS, CE) (PE09_A2009-6)
Physical Education

A - Fitness (continued)

- demonstrate progress toward or meet health-related fitness standards as defined by research (GPS, CE) (PE09_A2009-7)
- select and evaluate physical activities from a variety of facilities, based on personal interest, goals, and fulfillment (GPS) (PE09_A2009-8)
- compare and contrast how activity participation patterns are likely to change throughout life and plan strategies to deal with those changes (GPS) (PE09_A2009-9)
- describe how each component of health-related fitness is developed and maintained using the principles of training (GPS) (PE09_A2009-10)
- discuss dietary needs and practices necessary for optimal physical fitness (GPS) (PE09_A2009-11)
- explain the difference in training for the development of muscular strength and muscular endurance (GPS) (PE09_A2009-12)
- create motivational strategies for enhancing participation in health-related fitness activities (GPS) (PE09_A2009-13)
- demonstrate a positive attitude toward physical self and lifelong physical activity (GPS, CE) (PE09_A2009-14)
- participate regularly in some form of health-enhancing activity (GPS, CE) (PE09_A2009-15)
- demonstrate ability to access and interpret information regarding age-appropriate fitness levels (PE09_A2009-16)

LIFETIME FITNESS

A - Fitness

- demonstrate the correct warm-up and cool-down techniques (PELF_A2009-1)
- perform and administer fitness assessment items, for the maintenance or improvement of all health-related fitness components (GPS, CE) (PELF_A2009-2)
- develop goals, using the results of the fitness assessment items, for the maintenance or improvement of all health-related fitness components (GPS, CE) (PELF_A2009-3)
- develop a personal fitness plan correctly incorporating the principles of training which will lead to attainment of or progress toward the fitness goals (GPS, CE) (PELF_A2009-4)
- explain the importance of including a variety of activities in a fitness workout (PELF_A2009-5)
- implement a personal fitness plan (CE) (PELF_A2009-6)
- evaluate the effectiveness of daily workouts using appropriate means (PELF_A2009-7)
- keep daily records indicating pertinent aspects of workout and progress toward fitness goals (CE) (PELF_A2009-8)
- perform fitness assessment items subsequently at appropriate intervals and use results to make adjustments to goals and personal fitness plan (PELF_A2009-9)

B - Health / Active Living

- discuss how physical, mental, and emotional well-being is positively influenced by regular physical exercise (CE) (PELF_B2009-10)
- explain how lifestyle choices are related to the quality of life (PELF_B2009-11)
- discuss the effects that diet and nutrition have on physical performance and body composition (PELF_B2009-12)
- explain strategies to deal with changing participation patterns that occur throughout life (PELF_B2009-13)
- discuss the effects that fraud and deception have on fitness-related areas such as exercise equipment and diet supplements (PELF_B2009-14)
LIFETIME SPORTS

A - History
• discuss the origin and development of selected sports (PELS_A2009-1)

B - Rules and Terminology
• know and apply the rules of selected lifetime sports (GPS) (PELS_B2009-2)

C - Technique and Skills
• describe how skills and game play can be enhanced by using principles of training and conditioning (GPS) (PELS_C2009-3)
• demonstrate ability to perform and assess critical elements essential to competent performance (GPS) (PELS_C2009-4)

D - Strategy and Tactics
• apply offensive and defensive strategies (GPS) (PELS_D2009-5)

E - Etiquette, Procedures and Safety
• display appropriate etiquette, care of equipment, and safety during all activities (GPS, CE) (PELS_E2009-6)
• demonstrate respect for the diversity, strengths, and weaknesses of team members, individuals, and opponents (CE) (PELS_E2009-7)

F - Fitness
• participate regularly in physical activity (GPS) (PELS_F2010-1)
• achieve and maintain a health-enhancing level of physical fitness (GPS) (PELS_F2010-2)

OUTDOOR EDUCATION

A - Terminology
• apply correct terminology specific to each selected outdoor education activity (PEOE_A2009-1)

B - Technique and Skill
• demonstrate the ability to safely perform skills necessary in specific outdoor education activities (GPS) (PEOE_B2009-2)

C - Strategy and Tactics
• apply strategies and tactics needed in selected outdoor education activities (GPS) (PEOE_C2009-3)
• describe laws specific to selected outdoor activities (GPS) (PEOE_C2009-4)

D - Etiquette, Procedures and Safety
• utilize all safety procedures in selected outdoor education activities (GPS) (PEOE_D2009-5)
• value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction (GPS) (PEOE_D2010-1)

E - Fitness
• participate regularly in physical activity (GPS) (PEOE_E2010-2)
• achieve and maintain a health-enhancing level of physical fitness (GPS) (PEOE_E2010-3)
RECREATIONAL GAMES

A - History
• discuss the origin and development of recreational games (PERG_A2009-1)

B - Rules and Terminology
• apply the rules of selected recreational games (PERG_B2009-2)

C - Technique and Skills
• exhibit a level of competency, advancing to a level of proficiency in a particular skill (PERG_C2009-3)
• demonstrate ability to perform and assess critical elements essential to competent performance (PERG_C2009-4)

D - Strategy and Tactics
• apply strategies to enhance performance during games (PERG_D2009-5)

E - Etiquette, Procedures and Safety
• display appropriate etiquette, care of equipment, and safety during all activities (CE) (PERG_E2009-6)
• demonstrate respect for the diversity, strengths, and weaknesses of team members, individuals, and opponents (CE) (PERG_E2009-7)

F - Fitness
• participate regularly in physical activity (GPS) (PERG_F2010-1)
• participate in personal choice activities (GPS) (PERG_F2010-2)
• achieve and maintain a health-enhancing level of physical fitness (GPS) (PERG_F2010-3)

SPORTS MEDICINE

A - Role of Athletic Training
• compare and contrast the purposes and roles of the athletic training program, coach, physician, and other health care professionals (PESM_A2009-1)
• explore the relationship between the field of Sports Medicine and other specialists in science and medicine (PESM_A2009-2)

B - Anatomy and Physiology
• identify basic anatomy and physiology necessary for the diagnosis and treatment of injuries (PESM_B2009-3)
• use and apply standard terminology in relation to injuries, illnesses, and medical concepts (PESM_B2009-4)

C - Injury Prevention
• describe the use of conditioning and protective equipment in injury prevention (PESM_C2009-5)
• compare and contrast proper and improper nutrition, training menus, ergogenic aids, and steroid use (PESM_C2009-6)
• demonstrate correct technique for taping, wrapping, and/or bracing techniques (PESM_C2009-7)
• identify and analyze hazardous athletic facilities and equipment (PESM_C2009-8)

D - Emergency Procedures
• assess the vital signs of an injured athlete (PESM_D2009-9)
• assess and respond to various sport injuries (PESM_D2009-10)
• apply proper emergency procedures in athletic injury situations (PESM_D2009-11)

E - Healing and Rehabilitation
• describe the healing process in soft-tissue injuries (PESM_E2009-12)
• describe the healing process in bone-fracture injuries (PESM_E2009-13)
Physical Education

E - Healing and Rehabilitation (continued)
• describe the implications of pain to sport injury (PESM_E2009-14)
• compare the values of and procedures in the following therapeutic modalities: ice, heat, ultrasound, and massage (PESM_E2009-15)
• compare and contrast the various components of exercise rehabilitation (PESM_E2009-16)
• describe the organization of a typical weight training facility (PESM_E2009-17)

F - Sports Conditions
• recognize the most common lower extremity injuries (PESM_F2009-18)
• recognize the most common upper extremity injuries (PESM_F2009-19)
• demonstrate first aid procedures for head and neck injuries (PESM_F2009-20)
• demonstrate first aid procedures for heat illnesses (PESM_F2009-21)
• list standard emergency procedures related to internal injuries (PESM_F2009-22)
• recognize common skin and soft-tissue conditions (PESM_F2009-23)

G - Fitness
• achieve and maintain a health-enhancing level of physical fitness (GPS) (PESM_G2010-1)

TEAM SPORTS

A - History
• discuss the origin and development of selected sports (GPS) (PETS_A2009-1)

B - Rules and Terminology
• apply the rules to selected sports (PETS_B2009-2)
• demonstrate how skills and game play can be enhanced using health-related principles of training (GPS) (PETS_B2009-3)

C - Technique and Skill
• demonstrate ability to perform and assess critical elements essential to competent performance (GPS, CE) (PETS_C2009-4)
• describe the relationship between principles of training and conditioning appropriate to specific team sports (GPS) (PETS_C2009-5)
• demonstrate officiating techniques of selected sports (GPS) (PETS_C2009-6)

D - Strategy and Tactics
• diagram offensive and defensive strategies (GPS) (PETS_D2009-7)

E - Etiquette, Procedures and Safety
• demonstrate respect for the diversity, strengths, and weaknesses of team members, individuals, and opponents (GPS, CE) (PETS_E2009-8)
• display appropriate etiquette, care of equipment, and safety during an activity (GPS, CE) (PETS_E2009-9)

F - Fitness
• participate regularly in physical activity (GPS) (PETS_F2010-1)
• achieve and maintain a health-enhancing level of physical fitness (GPS) (PETS_F2010-2)
THEORY IN PHYSICAL EDUCATION

A - Instructional Methods
- plan developmentally appropriate lessons in physical education (PETH_A2009-1)
- assist a physical educator at the high school, middle school, or elementary school level in an instructional setting (PETH_A2009-2)
- apply effective teaching techniques in practice teaching (PETH_A2009-3)
- administer various fitness or skill assessment instruments in physical education (PETH_A2009-4)

TRACK AND FIELD

A - History
- discuss the origin and development of selected track and field events (PETF_A2009-1)

B - Rules and Terminology
- apply the rules and terminology of selected track and field events (PETF_B2009-2)

C - Technique and Skills
- describe how skills and performance in individual events can be enhanced by proper training and conditioning techniques (PETF_C2009-3)
- demonstrate the ability to perform and assess critical elements essential to competent performance (PETF_C2009-4)

D - Strategy and Tactics
- apply strategies specific to each event (PETF_D2009-5)

E - Etiquette, Procedures and Safety
- display appropriate care of equipment and safety during all activities (PETF_E2009-6)
- demonstrate respect for the diversity, strengths, and weaknesses of team members, individuals, and opponents (CE) (PETF_E2009-7)

F - Fitness Aspects
- achieve and maintain a health-enhancing level of physical fitness (GPS) (PETF_F2010-1)

TUMBLING - STUNTS

A - Skill and Technique
- exhibit a level of competency, advancing to a level of proficiency in a particular skill (PETU_A2009-1)
- identify and apply critical elements essential to competent and proficient performance (PETU_A2009-2)
- describe principles of training and conditioning appropriate to specific tumbling and stunt skills (PETU_A2009-3)
- achieve and maintain a health-enhancing level of physical fitness (GPS) (PETU_A2010-1)

B - Etiquette, Procedures and Safety
- display appropriate etiquette, care of equipment, safety, and spotting techniques (PETU_B2009-4)
WEIGHT TRAINING

A - Weight Training for Fitness
• demonstrate correct training methods used in weight training (PEWT_A2009-1)
• identify weight loads, number of sets, and repetitions in various weight training programs (PEWT_A2009-2)
• identify the types of exercises to be performed in order to enhance the development of various muscle groups (PEWT_A2009-3)
• develop and plan a series of exercises in order to maximize the benefits of a weight training program (CE) (PEWT_A2009-4)
• explain the importance of performing large muscle group exercises prior to small or isolated muscle group movements (PEWT_A2009-5)
• describe why the altering method of push-pull or upper body-lower body exercise method is performed in order to maximize training benefits (PEWT_A2009-6)
• describe the importance of determining the amount of rest needed between sets and training workout routines in order to maximize training (PEWT_A2009-7)
• describe the causes and effects of over-training (PEWT_A2009-8)
• identify the major muscle groups of the body (PEWT_A2009-9)
• achieve and maintain a health-enhancing level of physical fitness (GPS) (PEWT_A2010-1)

B - Weight Training Equipment and Aids
• identify how to properly use the two major types of weight training equipment, machines, and free weights (PEWT_B2009-10)

C - Program Organization and Technique
• demonstrate proper technique in executing various lifts (PEWT_C2009-11)
• describe the importance of the “warm-up” and “cool-down” phase of the training program in order to prepare the body for stress and recovery (PEWT_C2009-12)
• demonstrate the proper spotting techniques for various lifts (PEWT_C2009-13)
• describe the importance of charting and record-keeping in a weight training program (PEWT_C2009-14)

D - Nutrition, Rest and Ergogenic Aids
• identify the harmful effects of anabolic steroids and dietary supplements on the body and how they affect the weight training program (PEWT_D2009-15)
JROTC AIR FORCE: A JOURNEY INTO AVIATION HISTORY

A -
• explain historical continuity and change related to mankind’s early attempts to fly from ancient times, beginning with the Chinese and ending with Da Vinci (GPS) (RCAH_A2010-1)
• investigate the development of lighter-than-air flight (GPS) (RCAH_A2010-2)
• analyze the specific ideas and beliefs that led to the success of the Wright Brothers in achieving heavier-than-air flight (GPS) (RCAH_A2010-3)
• analyze the specific ideas and beliefs that led to the success of other pilots and inventors following the Wright Brothers in 1903 until World War I (GPS) (RCAH_A2010-4)
• explain the contributions aircraft and pilots made during World War I and how the aircraft revolutionized war (GPS) (RCAH_A2010-5)
• identify the significance and major contributions of the barnstormers after World War I (GPS) (RCAH_A2010-6)
• identify the significance of trans-Atlantic flight and the contributions of Charles Lindbergh and Amelia Earhart to flying (GPS) (RCAH_A2010-7)
• explain the history of the Air Corps and the resultant organizations that preceded the Air Force (GPS) (RCAH_A2010-8)
• identify the significant developments of airpower as the flying force evolved during World War II (GPS) (RCAH_A2010-9)
• describe the history of commercial aircraft and the significance of key developments in aircraft and use that occurred through the years (GPS) (RCAH_A2010-10)
• identify the significance of a separate Air Force and the major defense contributions made by the Air Force during the first sixty years it existed (GPS) (RCAH_A2010-11)
• describe the history and significance of space exploration (GPS) (RCAH_A2010-12)
• identify the significant scientific and technological developments of the space race (GPS) (RCAH_A2010-13)

JROTC AIR FORCE: LEADERSHIP EDUCATION I

A -
• explain the history of AFJROTC, the selection of commander and staff positions, and describe the cadet organization (GPS) (RCL1_A2010-1)
• summarize the history of the military uniform, recognize Air Force and AFJROTC insignia, and explain the dress and personal appearance standards required when wearing the uniform (GPS) (RCL1_A2010-2)
• explain historic customs and courtesies, when and how to salute, and the use of correct military titles (GPS) (RCL1_A2010-3)
• summarize the meaning and purpose of attitude, discipline, respect, and integrity in AFJROTC (GPS) (RCL1_A2010-4)
• explain how values and ethics are formed, how they affect both individuals and society, how to make ethical decisions, and be able to recognize the USAF core values (GPS) (RCL1_A2010-5)
• summarize and apply rules of etiquette and explain how to maintain appropriate personal hygiene and grooming (GPS) (RCL1_A2010-6)
• explain the main causes of stress and how to manage stress (GPS) (RCL1_A2010-7)
• explain suicide risk factors and signs and when and how to seek professional mental health care (GPS) (RCL1_A2010-8)
• recognize how to predict and prevent violence and how to protect oneself from violence (GPS) (RCL1_A2010-9)
• explain why and how to seek preventive health care services and identify the roles of various health organizations including government agencies (GPS) (RCL1_A2010-10)
• explain how to choose and maintain a healthful diet and use resources to make healthful dietary decisions (GPS) (RCL1_A2010-11)
A - (continued)

- explain how to prepare for and what to do in a medical emergency (GPS) (RCL1_A2010-12)
- explain the importance of physical fitness, the measures of physical fitness, and demonstrate how to plan and execute a physical fitness plan (GPS) (RCL1_A2010-13)
- explain how to eat healthfully, the health risks of eating disorders, and how to seek help for an eating disorder (GPS) (RCL1_A2010-14)
- describe the difference between medicine and drugs and explain the dangers of drug abuse, how to avoid drugs, and when and how to seek help for drug-related issues (GPS) (RCL1_A2010-15)
- describe the dangers of tobacco, how to avoid using it, and how to seek help in quitting tobacco use (GPS) (RCL1_A2010-16)
- explain the dangers of alcohol, ways to avoid using alcohol, and when and how to seek help for alcohol-related issues (GPS) (RCL1_A2010-17)
- summarize the history and courtesies rendered to the flag of the United States and the National Anthem (GPS) (RCL1_A2010-18)
- explain the history of the Great Seal of the United States, the Air Force Seal, the Pledge of Allegiance, and the American’s Creed (GPS) (RCL1_A2010-19)
- summarize the role and functions of government, the citizenship and naturalization process, and the duties and responsibilities of citizenship (GPS) (RCL1_A2010-20)
- recognize the content of the United States Constitution and explain how it is amended and interpreted (GPS) (RCL1_A2010-21)
- recognize the content of the Bill of Rights and summarize how citizens can protect their rights and freedoms (GPS) (RCL1_A2010-22)
- recognize the structure of the three branches of government and name and summarize the duties and responsibilities of the three branches of government (GPS) (RCL1_A2010-23)
- recognize and remember the defining characteristics of authoritarian governments, the salient features of current non-democratic governments and nations, and the characteristics of democratic governments (GPS) (RCL1_A2010-24)

JROTC AIR FORCE: LEADERSHIP EDUCATION II

A -

- describe and apply communication techniques (GPS) (RCL2_A2010-1)
- identify the component parts of the thinking process, recognize the standards of critical thinking, and explain the importance of learning to think and how to ask good questions (GPS) (RCL2_A2010-2)
- identify the six steps in the basic checklist for communication and organizational patterns (GPS) (RCL2_A2010-3)
- recognize the elements of effective writing and active voice in writing (GPS) (RCL2_A2010-4)
- summarize the steps for preparing to speak, for organizing a presentation, and skills needed for effective presentations (GPS) (RCL2_A2010-5)
- apply the rules associated with Maslow’s Hierarchy of Needs and recognize the elements of attitude and how goals influence actions (GPS) (RCL2_A2010-6)
- predict the ways that attitudes affect actions and remember and name the common defense mechanisms, the key elements of a positive attitude, and the priority of task completion and people (GPS) (RCL2_A2010-7)
- recognize the qualities of perseverance, courage, and patience in a leader (GPS) (RCL2_A2010-8)
- recognize integrity in good citizens and explain what it means to be a positive role model (GPS) (RCL2_A2010-9)
- explain how personality influences actions (GPS) (RCL2_A2010-10)
- explain the consequences of taking or avoiding responsibility and the consequences of actions and decisions (GPS) (RCL2_A2010-11)
- explain the four stages of team development and how to plan for and run an effective meeting (GPS) (RCL2_A2010-12)
- explain the dimensions of respect, the values of tolerance and understanding, and how to improve group effectiveness (GPS) (RCL2_A2010-13)
A - *(continued)*

- explain what qualities constitute an effective team (GPS) (RCL2_A2010-14)
- summarize the types of problems in groups and the levels of conflict in groups (GPS) (RCL2_A2010-15)
- explain common group problems, common indicators of group problems, and the six steps of problem-solving (GPS) (RCL2_A2010-16)
- recognize, remember, and explain the nature of consensus and methods of building consensus (GPS) (RCL2_A2010-17)
- recognize and explain the basic elements of leadership, the Air Force Core Values, and reasons for recognizing the Core Values (GPS) (RCL2_A2010-18)
- recognize and explain the traits of effective leaders and the importance of competence and commitment in a leader (GPS) (RCL2_A2010-19)
- summarize the key principles of leadership (GPS) (RCL2_A2010-20)
- summarize the four leadership styles and the primary factors of the leadership situation (GPS) (RCL2_A2010-21)
- recognize the readiness factors of followers and effective ways to relate to leaders (GPS) (RCL2_A2010-22)
- explain ways to prepare for leadership (GPS) (RCL2_A2010-23)

**JROTC AIR FORCE: SCIENCE OF FLIGHT**

A -

- describe the types of navigational aids used in flight (GPS)
- explain the basic facts and general principles of the atmosphere and weather elements (GPS) (RCSF_A2010-1)
- identify and explain the instruments and communications used in weather forecasting (GPS) (RCSF_A2010-2)
- explain the difference between regular weather and aviation weather (GPS) (RCSF_A2010-3)
- discuss the physiology of flight (GPS) (RCSF_A2010-4)
- explain the history of aerospace medicine and human engineering (GPS) (RCSF_A2010-5)
- describe the protective equipment used for actual and simulated flight (GPS) (RCSF_A2010-6)
- explain the principles of basic aeronautics (GPS) (RCSF_A2010-7)
- describe basic engine principles (GPS) (RCSF_A2010-8)
- list the basic and general operating principle of rocket engines (GPS) (RCSF_A2010-9)
- discuss the types of civilian and military aerospace vehicles (GPS) (RCSF_A2010-10)
- describe navigational aids (GPS) (RCSF_A2010-11)
- demonstrate the four elements of navigation (GPS) (RCSF_A2010-12)
- explain the types and functions of navigation instruments (GPS) (RCSF_A2010-13)
- describe dead reckoning techniques (GPS) (RCSF_A2010-14)
JROTC MARINE CORPS: LEADERSHIP EDUCATION I

A -
• know, understand, and apply objectives of leadership and core values (GPS) (RCM1_A2010-1)
• discuss current events related to patriotism and characterize the responsibilities and legal rights of an American citizen (GPS) (RCM1_A2010-2)
• define requirements to attain U.S. citizenship (GPS) (RCM1_A2010-3)
• evaluate the importance of physical fitness, physical training, health, hygiene, and nutrition (GPS) (RCM1_A2010-4)
• identify, understand, and apply basic Marine Corps fundamentals as related to administration, uniforms, customs, courtesies, traditions, rank structure, and chain of command (GPS) (RCM1_A2010-5)
• explain the purposes and objectives of basic drill and Marine ceremonies and demonstrate proficiency in teamwork, confidence, pride, alertness, and attention to detail through basic drill (GPS) (RCM1_A2010-6)

JROTC MARINE CORPS: LEADERSHIP EDUCATION II

A -
• identify and demonstrate leadership traits and apply principles of leadership (GPS) (RCM2_A2010-1)
• discuss current events and determine civic responsibilities (GPS) (RCM2_A2010-2)
• evaluate the importance of physical training and judge proper social skills as well as proper written and oral communication (GPS) (RCM2_A2010-3)
• develop a personal portfolio (GPS) (RCM2_A2010-4)
• identify, understand, and apply basic Marine Corps fundamentals as related to administration, uniforms, Marine Corps history, marksmanship, and first aid (GPS) (RCM2_A2010-5)
• explain the purposes and objectives of basic drill and Marine Corps ceremonies and demonstrate proficiency in teamwork, confidence, pride, alertness, and attention to detail through basic drill (GPS) (RCM2_A2010-6)

JROTC MARINE CORPS: LEADERSHIP EDUCATION III

A -
• apply the leadership principles and objectives of leadership and understand the application and differences in authority, responsibility, and accountability (GPS) (RCM3_A2010-1)
• discuss current events, describe the basic organization of the U.S. government, and know the requirements and process of becoming an American citizen (GPS) (RCM3_A2010-2)
• evaluate the importance of physical fitness, physical training, health, hygiene, and nutrition (GPS) (RCM3_A2010-3)
• explain suicide risk factors and signs and when and how to seek professional mental health care (GPS) (RCM3_A2010-4)
• analyze the job application process and the proper conduct for a job interview (GPS) (RCM3_A2010-5)
• demonstrate proper Marine Corps grooming standards (GPS) (RCM3_A2010-6)
• demonstrate the customs and courtesies associated with the U.S. flag (GPS) (RCM3_A2010-7)
• demonstrate a basic knowledge of sea service terminology (GPS) (RCM3_A2010-8)
• demonstrate a basic knowledge of early Marine Corps history (GPS) (RCM3_A2010-9)
• differentiate the purposes and objectives of basic drill and Marine ceremonies and demonstrate proficiency in teamwork, confidence, pride, alertness, and attention to detail through basic drill (GPS) (RCM3_A2010-10)
JROTC MARINE CORPS: LEADERSHIP IV

A -
• demonstrate the principles of motivation and discipline and understand the role of officers in the chain of command (GPS) (RCM4_A2010-1)
• compare and contrast the various political and economic systems of government and differentiate between them (GPS) (RCM4_A2010-2)
• demonstrate an appropriate level of writing skills through the writing of essays as well as evaluate the skills of other cadets (GPS) (RCM4_A2010-3)
• explore potential careers, complete a job application, and practice the interview process (GPS) (RCM4_A2010-4)
• demonstrate knowledge of military customs and courtesies, differentiate the rank insignia of other services and other service JROTC programs, and expand knowledge of Marine Corps history (GPS) (RCM4_A2010-5)
• discern the purpose and objectives of basic drill and Marine Corp ceremonies and demonstrate proficiency in teamwork, confidence, pride, alertness, and attention to detail through basic drill (GPS) (RCM4_A2010-6)

JROTC NAVY: NAVAL SCIENCE I - INTRODUCTION TO NJROTC

A -
• describe the history and background of the NJROTC program (GPS) (RCIN_A2010-1)
• explain the mission, goals, and policies of the NJROTC program (GPS) (RCIN_A2010-2)
• describe the history of the U.S. Navy and the role it has played in building our nation (GPS) (RCIN_A2010-3)
• discuss the objectives of the NJROTC program and the value the Navy places on physical fitness, military drill, and leadership training (GPS) (RCIN_A2010-4)
• describe the importance of career planning and utilize tools to ensure success for the future (GPS) (RCIN_A2010-5)
• demonstrate knowledge of followership and leadership principles, leadership opportunities in NJROTC, and interpersonal skills such as motivation, relationships, attitudes, and emotions (GPS) (RCIN_A2010-6)
• describe the importance of leadership and the role that leadership plays in NJROTC (GPS) (RCIN_A2010-7)
• describe the relationship between motivation, relationships, attitudes, and emotions (GPS) (RCIN_A2010-8)
• demonstrate knowledge of and respect for the responsibilities of loyal citizens in a democratic society (GPS) (RCIN_A2010-9)
• describe the success of the democratic form of government and how it is based upon equality, justice, and freedom for all citizens (GPS) (RCIN_A2010-10)
• describe the importance and value of being a citizen of the United States of America (GPS) (RCIN_A2010-11)
• demonstrate knowledge of how the Declaration of Independence and the Constitution of the United States established the foundation for how our democratic form of government operates to protect the rights of and defend the citizens of the United States (GPS) (RCIN_A2010-12)
• demonstrate knowledge of the mission, construction, and different classes of Navy ships used to carry out the military strategy of the United States (GPS) (RCIN_A2010-13)
• demonstrate knowledge of the history, development, and mission of naval aviation and the contributions it made to sea warfare (GPS) (RCIN_A2010-14)
JROTC NAVY: NAVAL SCIENCE I - CADET FIELD MANUAL

A - NJROTC Uniform Regulations, Ranks, and Customs
• demonstrate the knowledge of and ability to present oneself properly groomed in correctly composed designated uniform (GPS) (RCFM_A2010-1)
• recognize the various rates/ranks of NJROTC and active duty personnel and understand the different assignments associated with each billet (GPS) (RCFM_A2010-2)
• demonstrate knowledge of and respect for military customs, courtesies, etiquette, and ceremonies (GPS) (RCFM_A2010-3)
• understand and fulfill the proper procedures for inspection (GPS) (RCFM_A2010-4)
• demonstrate the purposes of military drill, terms used in military drill, different types of commands, proper techniques for giving commands, and general rules for drill (GPS) (RCFM_A2010-5)
• demonstrate the prescribed drill without arms movements in military drill and ceremonies (GPS) (RCFM_A2010-6)
• demonstrate the prescribed positions, movements, and commands of the Manual of Arms with the NJROTC Drill Rifle (Mark 5 or Mark 6 M-1) (GPS) (RCFM_A2010-7)
• demonstrate the purpose of military drill, terms used in military drill, different types of commands, proper techniques for giving commands, and general rules for drill (GPS) (RCFM_A2010-8)
• demonstrate the prescribed movements and handling execution of swords based on the Sword Manual (GPS) (RCFM_A2010-9)
• demonstrate the execution of commands for ceremonies using the American flag (GPS) (RCFM_A2010-10)
• discuss the theory of survival and apply that knowledge to the practice of survival under a variety of climatic conditions (GPS) (RCFM_A2010-14)
• discuss the chain of command as it relates to an effective and functioning NJROTC organization (GPS) (RCFM_A2010-15)
• discuss the orders to the sentry as it relates to ones performance of duties as a sentinel and a member of the guard (GPS) (RCFM_A2010-16)

JROTC NAVY: NAVAL SCIENCE II – MARITIME HISTORY

A - Sea Power and Early Western Civilization
• demonstrate an understanding of how sea power influenced the growth of early western civilization (GPS) (RCMH_A2010-1)

B - The American Revolution
• demonstrate an understanding of how sea power influenced the American Revolution (GPS) (RCMH_B2010-2)

C - The Growth of American Sea Power, 1783 - 1860
• demonstrate an understanding of the growth of American sea power from 1783-1860 (GPS) (RCMH_C2010-3)

D - The Civil War, 1861 - 1865
• describe the role of the Civil War and the importance it played in American History (GPS) (RCMH_D2010-4)

E - The Rise to World Power Status, 1865 - 1914
• describe the Navy's role from the rise to world power status between 1865 and 1914 (GPS) (RCMH_E2010-5)

F - World War I, 1914 - 1918
• describe the Navy's role in World War I (GPS) (RCMH_F2010-6)
G - The Interwar Years, 1918 - 1941
• demonstrate an understanding of the interwar years (GPS) (RCMH_G2010-7)

H - World War II, 1941 - 1945
• demonstrate an understanding of naval history in World War II in the Atlantic from 1941 - 1945 (GPS) (RCMH_H2010-8)
• demonstrate an understanding of naval history in World War II in the Pacific from 1941 - 1945 (GPS) (RCMH_H2010-9)

I - The Cold War Era, 1945 - 1991
• demonstrate an understanding of naval history in the Cold War Era (GPS) (RCMH_I2010-10)

J - The 1990s and Beyond
• explore and gain an understanding of naval history in the 1990s and beyond (GPS) (RCMH_J2010-11)

JROTC NAVY: NAVAL SCIENCE II - NAUTICAL SCIENCE

A - Maritime Geography of the Eastern and Western Seas
• explore maritime geography as it relates to our national resources, landforms, climate, soil, bodies of water, people, governments, military, and geopolitics (GPS) (RCNS_A2010-1)

B - Oceanography
• explore and gain an understanding of the significance of oceanographic study (GPS) (RCNS_B2010-2)
• explore and gain an understanding of the significance of undersea landscapes (GPS) (RCNS_B2010-3)
• explore and gain an understanding of the makeup and movement of sea water (GPS) (RCNS_B2010-4)
• explore and gain an understanding of life in the sea (GPS) (RCNS_B2010-5)

C - Meteorology
• demonstrate a working knowledge of meteorology and how it affects mankind (GPS) (RCNS_C2010-6)
• explain the function of clouds and fog (GPS) (RCNS_C2010-7)
• describe the functions of wind, weather, and fronts and how weather forecasting is affected by these factors (GPS) (RCNS_C2010-8)

D - Astronomy
• explain how the solar system and the related bodies function with one another (GPS) (RCNS_D2010-9)

E - Asteroids, Comets, and Meteors
• explain asteroid, comet, and meteor functions and how they pertain to our solar system and its related bodies: moon, sun, stars, and planets (GPS) (RCNS_E2010-10)

F - Physical Science
• explain and understand basic electricity and electronics (GPS)
• explain motion, force, and aerodynamics (GPS) (RCNS_F2010-11)
• explain and understand buoyancy (GPS) (RCNS_F2010-12)
Study Skills

SAT PREP

A - Language Arts (Listening and Speaking)

- take notes on the main and subordinate ideas in lectures and discussions and report accurately what others have said (SKSP_A2004-1)
- recognize speaker’s purpose and identify verbal and nonverbal components of communication (body language, facial expressions, gestures) (SKSP_A2004-2)
- speak in a clear, understandable manner (SKSP_A2004-3)
- contribute to discussions, present prepared ideas, and use language appropriate to situation and audience (SKSP_A2004-4)

B - Language Arts (Reading)

- read poems, short stories, essays, novels, magazines, newspapers, charts, graphs, and technical documents for pleasure and self-improvement; expect reading to make sense, answer questions, or stimulate ideas (SKSP_B2004-5)
- read critically, ask pertinent questions, recognize assumptions and implications, and evaluate ideas (SKSP_B2004-6)
- identify, comprehend, and summarize the main and subordinate ideas in a written work (SKSP_B2004-7)
- distinguish between fact and opinion (SKSP_B2004-8)
- gain insight into human behavior from the study of literature (SKSP_B2004-9)
- make and defend inferences, conclusions, and comparisons (SKSP_B2004-10)
- evaluate quality of reading material and its content based on author’s purpose (SKSP_B2004-11)
- evaluate writing relative to student’s own purposes for reading (SKSP_B2004-12)
- interpret author’s meaning (SKSP_B2004-13)
- read two passages; answer questions about each passage and about the relationship(s) between the two passages (SKSP_B2004-14)

C - Language Arts (Vocabulary)

- use context clues to identify meaning (connotation and denotation) of unknown words while reading (SKSP_C2004-15)
- complete sentences based on context clues, meaning, and intent (SKSP_C2004-16)
- define unfamiliar words by using appropriate structural analysis skills including prefixes, suffixes, and root words (SKSP_C2004-17)
- acquire increased vocabulary through reading and listening; demonstrate progress through speaking and writing (SKSP_C2004-18)
- construct and complete word analogies (SKSP_C2004-19)

D - Language Arts (Writing)

- write for many purposes, including but not limited to personal, social, academic, and business (SKSP_D2004-20)
- draft, revise, and edit writing to improve fluency, content, organization, and style; eliminate unnecessary wordiness (SKSP_D2004-21)
- write and support thesis statements (SKSP_D2004-22)
- develop a central idea with examples, illustrations, facts, and details (SKSP_D2004-23)
- write logical and effective transitions between ideas and paragraphs (SKSP_D2004-24)
- write using various methods of ordering: chronological, spatial, cause-to-effect, problem, cause, solution; order of importance; comparison and contrast (SKSP_D2004-25)
- edit for spelling, fragments, and run-on sentences, to clarify misplaced modifiers, to correct faulty parallelism and maintain consistent sentence structure, and to correct faulty coordination and subordination (SKSP_D2004-26)
- establish voice through tone, word choice, rhetorical devices, and literary devices (SKSP_D2004-27)
- use language appropriate to situation and audience (SKSP_D2004-28)
- use active and passive voice appropriately (SKSP_D2004-29)
- use available technology to assist in writing (SKSP_D2004-30)
Study Skills

E - Language Arts (Grammar, Usage, and Mechanics)
- write Standard American English sentences with correct verb forms, punctuation, capitalization, possessives, plural forms and other mechanics, word choice, and spelling (SKSP_E2004-31)
- use the correct form of words such as accept/except, affect/effect (SKSP_E2004-32)
- correct mistakes when adjectives have been used as adverbs or adverbs have been used as adjectives (SKSP_E2004-33)
- correct double negatives (SKSP_E2004-34)
- maintain consistent number, gender, point-of-view, and verb tense (SKSP_E2004-35)
- correct subject-verb agreement: when subject follows verb, when subject and verb are separated, and when the subject seems plural (SKSP_E2004-36)
- correct problems with pronouns: pronoun in the wrong number, pronoun in the wrong case in compound noun phrases, pronoun shift, pronoun with ambiguous reference (SKSP_E2004-37)

F - Mathematics (Accessing Information)
- use a variety of print and non-print resources (e.g., films, recordings, theatre, and computer databases) as parts of the study of literature (SKSP_F2004-38)
- use research process: selecting topic, formulating questions, identifying key words, choosing sources, skimming, paraphrasing, note-taking, organizing, summarizing, and presenting (SKSP_F2004-39)

G - Mathematics (Basic Numbers and Operation)
- identify and compare the proper order of mathematical operations and the use of signed numbers and variables (SKSP_G2004-40)
- simplify and find fraction and decimal equivalents and how to add, subtract, multiply, and divide them (SKSP_G2004-41)
- identify, compare, and apply real, exponential, prime, composite, and irrational numbers (SKSP_G2004-42)
- recognize and apply the transitive and zero properties of multiplication (SKSP_G2004-43)
- apply the concepts of ratios (SKSP_G2004-44)
- apply concept of irrational numbers involving square roots and the Pythagorean theorem (SKSP_G2004-45)

H - Mathematics (Algebra and Functions)
- apply factoring and pattern recognition strategies (SKSP_H2004-46)
- model, simplify, and solve algebraic expressions (SKSP_H2004-47)
- apply problem-solving strategies to traditional geometry problems and problems using algebraic equations (SKSP_H2004-48)
- apply the concepts of ratio and proportion (SKSP_H2004-49)

I - Mathematics (Geometry and Measurement)
- apply the concepts and properties of points, lines, angles, and planes (SKSP_I2004-50)
- identify, compare, and compute the areas of polygons and circles including perimeter, circumference, area, volume, and surface area (SKSP_I2004-51)
- classify and work with the angles formed by transversals and parallel lines (SKSP_I2004-52)
- identify and apply the concepts of congruency, similarity, and corresponding parts (SKSP_I2004-53)
- apply the properties of 45-45-90 and 30-60-90 triangles (SKSP_I2004-54)

J - Mathematics (Probability and Statistics)
- interpret data from graphs (SKSP_J2004-55)
- read and interpret data from pie, bar, and line graphs (SKSP_J2004-56)
- apply the concepts of central tendency (SKSP_J2004-57)
- apply the concepts of mean, median, and mode (SKSP_J2004-58)
- calculate and analyze probabilities of an event (SKSP_J2004-59)

K - Mathematics (Problem Solving and Strategies)
- apply number sense and estimation skills to understand alternative approaches to basic computation problems and word problems (SKSP_K2004-60)
Study Skills

K - Mathematics (Problem Solving and Strategies) (continued)
• describe and analyze patterns in non-routine problem-solving situations (SKSP_K2004-61)
• apply the strategy of pattern recognition to find patterns and relationships among numbers (SKSP_K2004-62)
• model expressions and choose appropriate values for variables (SKSP_K2004-63)
• evaluate expressions by substituting real numbers and computing the results (SKSP_K2004-64)
• apply problem-solving strategies to non-routine problems (SKSP_K2004-65)

L - Test Taking Strategies and Skills
• correctly complete a SAT registration form (SKSP_L2004-66)
• state the significance of SAT scores and College Board requirements in college entrance and earning scholarships (SKSP_L2004-67)
• interpret SAT score (SKSP_L2004-68)
• evaluate various resources available to help prepare for the SAT (SKSP_L2004-69)
• understand the advantages and disadvantages of guessing an answer, leaving an answer blank, or choosing an incorrect answer on the SAT (SKSP_L2004-70)
Broadcast / Video Production

BROADCAST/VIDEO PRODUCTION I

A -
• identify inventions and technical and social developments that led to the creation of radio and television in a broadcast environment (GPS) (BVP1_A2009-1)
• utilize trade terminology in an appropriate manner (GPS) (BVP1_A2009-2)
• describe and follow safety procedures when working with TV equipment (GPS) (BVP1_A2009-3)
• demonstrate proper set-up and use of basic production equipment (GPS) (BVP1_A2009-4)
• identify and create different script types (GPS) (BVP1_A2009-5)
• demonstrate proper use and operation of studio equipment and production techniques while working as part of a production team (GPS) (BVP1_A2009-6)
• demonstrate skills related to set design and layout (GPS) (BVP1_A2009-7)
• identify lighting instruments and design a light plot for studio or field production, following all safety procedures and utilizing proper television terminology (GPS) (BVP1_A2009-8)
• identify different editing methods, equipment, and techniques and demonstrate them in the production of an edited story (GPS) (BVP1_A2009-9)
• demonstrate teamwork and proper use of equipment in a production team while producing a studio production (GPS) (BVP1_A2009-10)
• investigate and demonstrate ethical use of equipment and storytelling (GPS) (BVP1_A2009-11)

B - Literacy Standards
• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BVP1_B2012-1)
• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BVP1_B2012-2)
• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BVP1_B2012-3)
• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BVP1_B2012-4)
• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BVP1_B2012-5)
• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BVP1_B2012-6)
• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BVP1_B2012-7)
• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BVP1_B2012-8)
• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BVP1_B2012-9)
• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BVP1_B2012-10)
• write arguments focused on discipline-specific content (CCGPS) (BVP1_B2012-11)
• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BVP1_B2012-12)
• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BVP1_B2012-13)
• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BVP1_B2012-14)
B - Literacy Standards (continued)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BVP1_B2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BVP1_B2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BVP1_B2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BVP1_B2012-18)
- 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 (CCGPS) (BVP1_B2012-19)

BROADCAST / VIDEO PRODUCTION II

A - Pre-Production, Production, and Post-Production Procedures
- demonstrate basic planning, writing, directing, and editing of a production (GPS) (BVP2_A2009-1)

B - Field Production
- utilize field equipment appropriately (GPS) (BVP2_B2009-2)

C - Basic Electrical Functions
- describe basic electrical functions (GPS) (BVP2_C2009-3)

D - Operational Setup and Maintenance
- utilize specified operational set-up/maintenance procedures (GPS) (BVP2_D2009-4)

E - Advanced Editing Operations
- perform advanced editing operations (GPS) (BVP2_E2009-5)

F - Studio Production
- model techniques involved with studio production (GPS) (BVP2_F2009-6)

G - Production Performance
- utilize appropriate production performance techniques (GPS) (BVP2_G2009-7)

H - Audio/Video Control Systems
- utilize audio/video control systems (GPS) (BVP2_H2009-8)

I - Production Graphics
- create production graphics (GPS) (BVP2_I2009-9)

J - Career Investigation
- identify career opportunities in broadcast/video production (GPS) (BVP2_J2009-10)

K - Entrepreneurship
- explain expenses, production costs, and budgets as they relate to a production (GPS) (BVP2_K2009-11)
- describe the importance of marketing in video production (GPS) (BVP2_K2009-12)
- exhibit qualities of a professional in and out of the studio (GPS) (BVP2_K2009-13)
L - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any
gaps or inconsistencies in the account (CCGPS) (BVP2_L2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by
paraphrasing them in simpler but still accurate terms (CCGPS) (BVP2_L2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations
in the text (CCGPS) (BVP2_L2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical
context relevant to grade-level texts and topics (CCGPS) (BVP2_L2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the
information or ideas (CCGPS) (BVP2_L2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying
important issues that remain unresolved (CCGPS) (BVP2_L2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video,
multimedia) in order to address a question or solve a problem (CCGPS) (BVP2_L2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or
challenging conclusions with other sources of information (CCGPS) (BVP2_L2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process,
phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BVP2_L2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BVP2_L2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BVP2_L2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BVP2_L2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and
audience (CCGPS) (BVP2_L2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on
addressing what is most significant for a specific purpose and audience (CCGPS) (BVP2_L2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to
ongoing feedback, including new arguments or information (CCGPS) (BVP2_L2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a
problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating
understanding of the subject under investigation (CCGPS) (BVP2_L2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the
strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text
selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format
for citation (CCGPS) (BVP2_L2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BVP2_L2012-18)
- 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 (CCGPS) (BVP2_L2012-19)

BROADCAST / VIDEO PRODUCTION III

A - Independent Production

- demonstrate independent technical skills and techniques in broadcasting and video production (GPS) (BVP3_A2009-1)

B - Collaborative Production

- create a group media production (GPS) (BVP3_B2009-2)
C - Literacy Standards

- cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BVP3_C2012-1)
- determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BVP3_C2012-2)
- follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BVP3_C2012-3)
- determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BVP3_C2012-4)
- analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BVP3_C2012-5)
- analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BVP3_C2012-6)
- integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BVP3_C2012-7)
- evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BVP3_C2012-8)
- synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BVP3_C2012-9)
- read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BVP3_C2012-10)
- write arguments focused on discipline-specific content (CCGPS) (BVP3_C2012-11)
- write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BVP3_C2012-12)
- produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BVP3_C2012-13)
- develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BVP3_C2012-14)
- use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BVP3_C2012-15)
- conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BVP3_C2012-16)
- gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BVP3_C2012-17)
- draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BVP3_C2012-18)
- 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 (CCGPS) (BVP3_C2012-19)

BROADCAST / VIDEO PRODUCTION IV

A -
- demonstrate a mastery level of production equipment used in broadcasting and video production in various workplace settings (GPS) (BVP4_A2009-1)
- produce a variety of programming that emulates professional productions (GPS) (BVP4_A2009-2)
- produce samples to enhance or replace existing portfolio artifacts (GPS) (BVP4_A2009-3)
B - Literacy Standards

• cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account (CCGPS) (BVP4_B2012-1)

• determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms (CCGPS) (BVP4_B2012-2)

• follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text (CCGPS) (BVP4_B2012-3)

• determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific technical context relevant to grade-level texts and topics (CCGPS) (BVP4_B2012-4)

• analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas (CCGPS) (BVP4_B2012-5)

• analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved (CCGPS) (BVP4_B2012-6)

• integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem (CCGPS) (BVP4_B2012-7)

• evaluate the hypotheses, data, analysis, and conclusions in technical texts, verifying the data when possible and corroborating or challenging conclusions with other sources of information (CCGPS) (BVP4_B2012-8)

• synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible (CCGPS) (BVP4_B2012-9)

• read and comprehend technical texts in the text complexity band independently and proficiently (CCGPS) (BVP4_B2012-10)

• write arguments focused on discipline-specific content (CCGPS) (BVP4_B2012-11)

• write informative/explanatory texts, including the narration of historical events or technical processes (CCGPS) (BVP4_B2012-12)

• produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (CCGPS) (BVP4_B2012-13)

• develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience (CCGPS) (BVP4_B2012-14)

• use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information (CCGPS) (BVP4_B2012-15)

• conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation (CCGPS) (BVP4_B2012-16)

• gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation (CCGPS) (BVP4_B2012-17)

• draw evidence from informational texts to support analysis, reflection, and research (CCGPS) (BVP4_B2012-18)

• 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 (CCGPS) (BVP4_B2012-19)
A -
- compute hours and wages and maintain work records accurately and in a timely manner (QCC) (CEYA_A2006-1)
- evaluate career choices (QCC) (CEYA_A2006-2)
- investigate career choices in an academic major (QCC) (CEYA_A2006-3)
- write resumes using standard formats (QCC) (CEYA_A2006-4)
- complete error-free job applications (QCC) (CEYA_A2006-5)
- list qualities expected by employer (QCC) (CEYA_A2006-6)
- follow written and verbal directions (QCC) (CEYA_A2006-7)
- practice safe working habits including the use of any required or necessary equipment (QCC) (CEYA_A2006-8)
- function in a work environment in accordance with company policies, child labor laws, and employer expectations (QCC) (CEYA_A2006-9)
- exhibit professionalism in employability skills such as punctuality and attendance (QCC) (CEYA_A2006-10)
- communicate verbally and in writing using standard English (QCC) (CEYA_A2006-11)
- identify sources of governmental services (QCC) (CEYA_A2006-12)
- perform assigned tasks (QCC) (CEYA_A2006-13)
- complete required forms and records accurately and in a timely manner (QCC) (CEYA_A2006-14)
- dress appropriately for the job setting (QCC) (CEYA_A2006-15)
- model appropriate public appearance (QCC) (CEYA_A2006-16)
- obtain a work permit (QCC) (CEYA_A2006-17)
- develop and modify work training agreements (QCC) (CEYA_A2006-18)
- acquire job-specific content and knowledge (QCC) (CEYA_A2006-19)
- model desirable work traits (QCC) (CEYA_A2006-20)
- model cooperative behavior with coworkers (QCC) (CEYA_A2006-21)
- adapt to the work environment (QCC) (CEYA_A2006-22)
- perform an acceptable volume of work in a job setting (QCC) (CEYA_A2006-23)
- examine self aptitude, interests, and attitudes (QCC) (CEYA_A2006-24)
- prepare for the interview process (QCC) (CEYA_A2006-25)
- complete appropriate job-related documents (QCC) (CEYA_A2006-26)
- establish short- and long-term goals (QCC) (CEYA_A2006-27)
- set, pursue, and attain goals in a work setting (QCC) (CEYA_A2006-28)
- perform job duties accurately and professionally (QCC) (CEYA_A2006-29)
- manage money and time using appropriate techniques (QCC) (CEYA_A2006-30)
- speak with proper articulation and pronunciation to communicate ideas (QCC) (CEYA_A2006-31)
- prepare speaking outlines (QCC) (CEYA_A2006-32)
- make oral presentations (QCC) (CEYA_A2006-33)
- accomplish tasks independently, accept constructive criticism, and work cooperatively in a team-based environment (QCC) (CEYA_A2006-34)
- document and cite sources for presentations (QCC) (CEYA_A2006-36)
- utilize a day planner or other organizing system to structure job tasks and manage time to meet deadlines (QCC) (CEYA_A2006-37)