



Curriculum Guidance
Document for
Academics

2022 - 2023

Table of Contents

Introduction/Part I.....	<u>2</u>
English Language Arts	<u>4</u>
Ninth Grade Literature and Composition	<u>19</u>
Tenth Grade Literature and Composition.....	<u>26</u>
American Literature and Composition.....	<u>32</u>
Advanced Composition.....	<u>37</u>
Math.....	<u>42</u>
Foundations of Algebra	<u>44</u>
Algebra I.....	<u>45</u>
Geometry.....	<u>50</u>
Algebra II.....	<u>56</u>
Pre-Calculus.....	<u>60</u>
Advanced Mathematical Decision Making.....	<u>65</u>
AP Calculus	<u>67</u>
Science	<u>68</u>
Environmental Science.....	<u>69</u>
Biology.....	<u>72</u>
Physical Science.....	<u>73</u>
Chemistry	<u>76</u>
Zoology.....	<u>77</u>
Social Studies	<u>78</u>
World History	<u>79</u>
American Government/Civics.....	<u>81</u>
United States History	<u>87</u>
Economics	<u>94</u>
Parts 2, 3, and 4 of the PLC Process.....	<u>103</u>

Introduction

This curriculum guidance document has been created to aid Fitzgerald High School College and Career Academy (FHSCCA) staff in planning instruction for students. Because the Georgia Standards of Excellence are numerous and broad, this document narrows those to essential standards that should be taught and assessed. Acknowledge that this is a living document as it will be revised and updated as needed to meet the needs of FHSCCA students.

Essential curriculum, sometimes referred to as “power standards,” is a set of standards each Professional Learning Community (PLC) has identified as the most important information that must be taught and assessed. While teachers will teach more standards, the focus is on standards that are necessary for assessments, subsequent courses, and life.

Pacing guides are documents created by PLCs that identify the approximate timing for teaching essential curriculum.

Learning targets are objectives created by PLCs that identify what students must know in order to master the essential curriculum.

Please note that essential curriculum, pacing guides, and learning targets are subject to change.

Part 1 of the PLC Process: What do we expect our students to learn?

The following standards and elements will be taught during the 2022-2023 school year. They are essential to promotion to the next grade and are the main standards that will be formally assessed and graded.

It should be expected that all students master each of the power standards outlined in the essential curriculum.

English Language Arts (ELA)

From the Georgia Department of Education (GaDOE; n.d.a):

Because of the flexibility of English Language Arts course offerings at the high school level, the Georgia Standards of Excellence (GSE) for grades 9 through 12 is organized into grade bands comprised of 9-10 and 11-12. The 9-12 Standards define what students should understand and be able to do by the end of each grade band. As students progress towards the successful culmination of their high school careers, they will consolidate and internalize all of the skills instilled through the full progression of the GSE. High school students will employ strong, thorough, and explicit textual evidence in their literary analyses and technical research. They will understand the development of multiple ideas through details and structure and track the development of complex characters and advanced elements of plot such as frame narratives and parallel storylines. Student writing will reflect the ability to argue effectively, employing the structure, evidence, and rhetoric necessary in the composition of effective, persuasive texts. Students will be able to construct college-ready research papers of significant length in accordance with the guidelines of standard format styles such as APA and MLA. Students in high school will have built strong and varied vocabularies across multiple content areas, including technical subjects. They will skillfully employ rhetoric and figurative language, purposefully construct tone and mood, and identify lapses in reason or ambiguities in texts. Students will recognize nuances of meaning imparted by mode of presentation, whether it is live drama, spoken word, digital media, film, dance, or fine art. Confident familiarity with important foundational documents from American history and from the development of literature over time will accrue before the end of grade 12. Students will graduate with the fully developed ability to communicate in multiple modes of discourse demonstrating a strong command of the rules of Standard English. Text complexity levels are assessed based upon a variety of indicators.

The 9-12 Standards are organized in the following Domains and Strands and include identical categories across grades. Use the blue box on the right to locate the full text of the standards for each grade level.

Reading for Literature (RL)

Key Ideas and Details: RL1, RL2, RL3

Craft and Structure: RL4, RL5, RL6

Integration of Knowledge and Ideas: RL7, RL9

Range of Reading/Text Complexity: RL10

Reading for Information (RI)

Key Ideas and Details: RI1, RI2, RI3

Craft and Structure: RI4, RI5, RI6

Integration of Knowledge and Ideas: RI7, RI8, RI9

Range of Reading/Text Complexity: RI10

Writing (W)

Text Types and Purposes: W1, W2, W3

Production/Distribution: W4, W5, W6

Research/Present Knowledge: W7, W8, W9

Range of Writing: W10

Language (L)

Conventions of Standard English: L1, L2

Knowledge of Language: L3

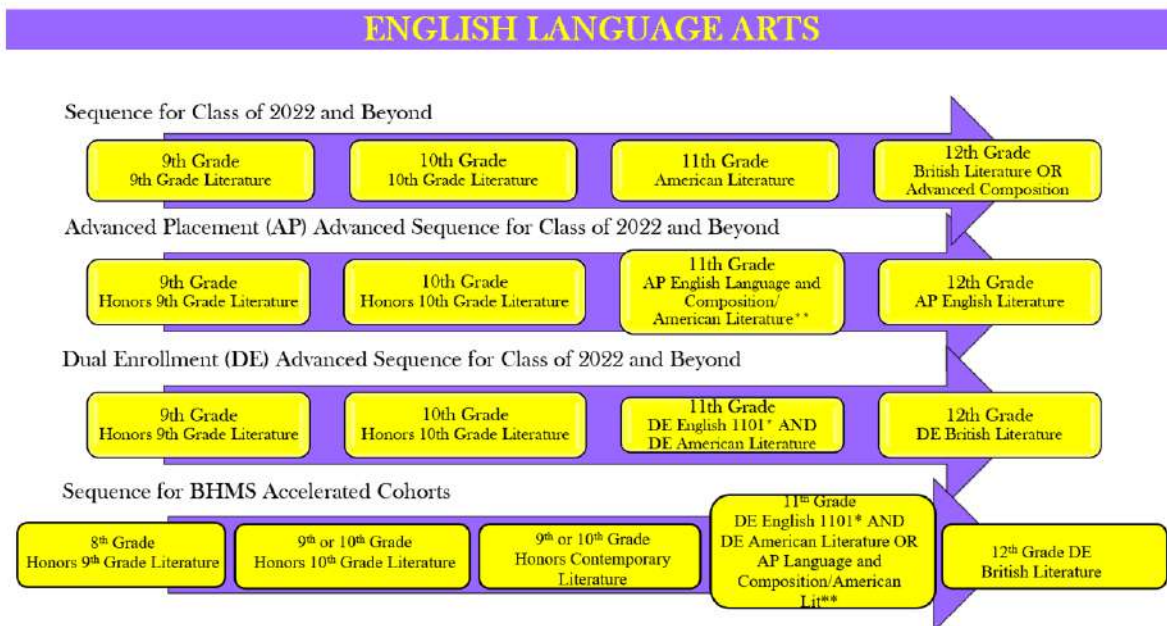
Vocabulary Acquisition and Use: L4, L5, L6

Speaking and Listening (SL)

Comprehension and Collaboration: SL1, SL2, SL3

Presentation of Knowledge and Ideas: SL4, SL5, SL6

The Standards by grade level and band provide useful specificity but allow schools and districts flexibility in course design. Teachers are free to provide students with whatever tools and knowledge their professional judgment and experience identify as most helpful for meeting the goals set out in the Standards.



*DE English 1101 is a pre-requisite to DE American Literature and DE British Literature

**DE English 1101 and Advanced Composition are incorporated into the AP course.

ELA Power Standards by Grade

9-12 English

Standard	9th	10 th	11 th	12th	Contemporary Lit	Creative Writing
RL1		Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. *Secondary	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. *Secondary		Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. *Secondary	
RL2		Determine a theme and/or central idea of text and closely 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. *Secondary	Determine two or more themes or central ideas of 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. *Secondary		Determine a theme and/or central idea of text and closely 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. *Secondary	
RL3		Analyze how complex characters develop over the course of a text, interact with other	Analyze the impact of the author's choices regarding how to develop and relate		Analyze how complex characters develop over the course of a text, interact with other characters, and	

		characters, and advance the plot or develop the theme.	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). *Secondary		advance the plot or develop the theme.	
RL4		Determine the meaning of words and phrase as they are used in the text including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone.	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.) *Secondary		Determine the meaning of words and phrase as they are used in the text including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone.	
RL5		Analyze how an author's choices concerning how to structure a text, order events within it, and manipulate time create such effects as mystery, tension or surprise.	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		Analyze how an author's choices concerning how to structure a text, order events within it, and manipulate time create such effects as mystery, tension or surprise.	

			to its overall structure and meaning as well as its aesthetic impact. * Secondary			
RL6			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)			
RL7			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 as well as one play by an American dramatist.)			
RL9			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.			
RI1		Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. *Secondary	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. *Secondary		Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. *Secondary	
RI2		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. *Secondary	Determine two or more themes or central ideas of 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. *Secondary		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. *Secondary	
RI3		Analyze how the author unfolds an analysis of series of ideas or events, including the	Analyze the impact of the author's choices regarding how to develop and relate		Analyze how the author unfolds an analysis of series of ideas or events, including the order in which the	

		order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	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). *Secondary		points are made, how they are introduced and developed, and the connections that are drawn between them.	
RI4		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.	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. *Secondary		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.	
RI5		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).	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. *Secondary		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).	
RI6			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.			
RI7			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.			
RI8	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. *Secondary				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. *Secondary	
RI9			Analyze 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. For British Literature, American Literature, and Multicultural Literature use comparable documents of historical significance.			
L5a						
W1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.		Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. *Secondary	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. *Secondary	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	
W2	Write informative/explanatory texts to examine and convey complex	Write informative/explanatory texts to examine and convey complex ideas, concepts, and	Write informative/explanatory texts to examine and convey complex ideas, concepts, and	Write informative/explanatory texts to examine and convey complex ideas, concepts, and	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately	

	ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content. *Secondary	information clearly and accurately through the effective selection, organization, and analysis of content. *Secondary	information clearly and accurately through the effective selection, organization, and analysis of content.	information clearly and accurately through the effective selection, organization, and analysis of content. *Secondary	through the effective selection, organization, and analysis of content. *Secondary	
W3		Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. *Secondary	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. *Secondary	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. *Secondary		Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.
W4	Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience. *Secondary			Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in Standards 1-3 above.)	Produce clear and coherent writing in which the development, organization and style are appropriate to task, purpose and audience. *Secondary	Produce clear and coherent writing in which development, organization, and style are appropriate to task, purpose, and audience.
W5	Develop and strengthen writing as needed by planning, revising,			Develop and strengthen writing as needed by planning, revising, editing,	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new	Develop and strengthen writing as needed by planning, revising,

	<p>editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. *Secondary</p>			<p>rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language Standards 1-3 up to and including grades 11-12.)</p>	<p>approach, focusing on addressing what is most significant for a specific purpose and audience. *Secondary</p>	<p>editing, rewriting or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p>
W6	<p>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. *Secondary</p>			<p>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.</p>	<p>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. *Secondary</p>	<p>Use technology, including the internet, to produce, publish, and update individual or shared writing projects in response to ongoing feedback, including new arguments or information.</p>
W7				<p>Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem;</p>		

				narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.		
W8	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. *Secondary			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.	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. *Secondary	
W9	Draw evidence from literary or informational texts			Draw evidence from literary or informational texts to	Draw evidence from literary or informational texts to support	Draw evidence from literary texts to support analysis,

	to support analysis, reflection and research. *Secondary			support analysis, reflection, and research	analysis, reflection and research. *Secondary	reflection, and research.
W10	Write routinely over extended time frames, and shorter time frames, for a range of tasks, purposes, and audiences. *Secondary			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	Write routinely over extended time frames, and shorter time frames, for a range of tasks, purposes, and audiences. *Secondary	Write routinely over extended time frames, and shorter time frames, for a range of tasks, purposes, and audiences.
L1	Demonstrate command of the conventions of standard English grammar and usage when speaking or writing: parallel structure, various types of phrases				Demonstrate command of the conventions of standard English grammar and usage when speaking or writing: parallel structure, various types of phrases	
L2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing: semicolon, colon, spell correctly				Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing: semicolon, colon, spell correctly	
L3	Apply knowledge of language to	10 th Honors teaches MLA & APA	APA	APA	Apply knowledge of language to understand how	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, and to write and to edit so that it conforms to the guidelines in a style manual (e.g. MLA, APA - Regular Ed=APA; Honors MLA and APA)	10 th Regular teaches APA			language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening, and to write and to edit so that it conforms to the guidelines in a style manual (e.g. MLA, APA - Regular Ed=APA; Honors MLA and APA)	understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening
L4						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.
SL4	Present information,	Present information, findings, and supporting	Present information, findings, and	Present information, findings, and	Present information, findings, and supporting	Present information,

<p>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. *Secondary</p>	<p>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. *Secondary</p>	<p>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. *Secondary</p>	<p>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.</p>	<p>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. *Secondary</p>	<p>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. *Secondary</p>
---	--	---	--	--	---

Ninth Grade Literature and Composition Learning Targets and Timeline

Writing standards for 9th grade are taught in the order listed below. As noted, language standards are addressed throughout the semester.

STANDARD	LEARNING TARGET
<p>ELAGSE9-10L1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Use parallel structure.</p> <p>b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations.</p> <p><i>Language standards should be addressed as daily warm-ups and embedded in writing instruction.</i></p> <p><i>CSA towards end of semester to address language standards.</i></p>	<p>Skills/Concepts for Students:</p> <ul style="list-style-type: none"> • Periodically review and maintain familiarity with common and more sophisticated rules of use, grammar, and conventions in standard English such as the parts of speech, agreement, and antecedents, etc. <ul style="list-style-type: none"> • I can write utilizing proper agree according to grammar rules (refer to A Teacher Guidance document, page 42) • Employ parallel structure in writing for effect, and recognize its use in texts <ul style="list-style-type: none"> • I can identify parallel structure and write utilizing parallel structure for effect (refer to GA Teacher Guidance document, page 42) • Review and employ knowledge of construction of phrases and clauses and use them correctly and effectively to construct varied sentences <ul style="list-style-type: none"> • I can write using a variety of phrases, clauses and varied sentence structure (refer to GA Teacher Guidance document, page 42) <p>Suggested Key Phrases from Guidance: Standard, Verb phrase, Independent clause, Parallel structure, Non-standard, Adjectival phrase, Dependent clause, Grammar Conventions Participial phrase, Prepositional phrase, Noun clause, Relative clause, Noun phrase, Absolute phrase, Adverbial clause</p>
<p>ELAGSE9-10L2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.</p> <p>b. Use a colon to introduce a list or quotation.</p> <p>c. Spell correctly.</p> <p>d. Produces legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization.</p> <p><i>Language standards should be addressed as daily warm-ups and embedded in writing instruction.</i></p>	<p>Skills/Concepts for Students:</p> <ul style="list-style-type: none"> • Review and maintain familiarity with rules and patterns of spelling in standard English and consult reference materials for clarification when in doubt about a spelling (embedded in instruction) <ul style="list-style-type: none"> • I can apply standard spelling rules and consult reference for clarification. • Do not allow abbreviations common to digital media to adversely impact spelling in your formal writing (no text lingo in formal writing). <ul style="list-style-type: none"> • I can maintain formal language when writing (no text lingo and abbreviations in formal writing) • Understand the rules of colon and semi-colon usage and use them correctly <ul style="list-style-type: none"> • I can properly utilize colons and semicolons in writing. •

<p><i>CSA towards end of semester to address language standards.</i></p>	<p>Suggested Key Phrases from Guidance: Semicolon, Quotation, Capitalization, Punctuation, Colon</p>
<p>ELAGSE9-10L3: 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, and to write and to edit so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, APA Handbook, Turabian’s Manual for Writers) appropriate for the discipline and writing type</p> <p><i>Language standards should be addressed as daily warm-ups and embedded in writing instruction.</i></p> <p><i>CSA towards end of semester to address language standards.</i></p>	<p>Skills/Concepts for Students:</p> <ul style="list-style-type: none"> • At a high-school level of sophistication, understand that language usage is a powerful cultural tool and that perceptions can rightly or wrongly be attached to language choices <ul style="list-style-type: none"> • I can differentiate when to use formal, informal, colloquial, and vernacular based upon author’s purpose and audience expectations. • By grade 9, be thoroughly familiar with what is meant by “manuscript style” and know the basic requirements of APA and MLA <ul style="list-style-type: none"> • I can properly utilize APA for in-text citations and works cited. • Honors teach both APA and MLA
<p>ELAGSE9-10W1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <p>a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.</p> <p>b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level and concerns.</p> <p>c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>d. Establish and maintain an appropriate style and objective tone.</p> <p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p>Skills/Concepts for Students:</p> <p>I can</p> <ul style="list-style-type: none"> • Distinguish supporting evidence from repetition or extraneous detail • Distinguish valid reasoning from logical fallacy • Understand what comprises sufficient evidence based on the nature of argument or claim • Address audience bias and counterclaims • Write with appropriate organizational structure for argument or claim (comparison/contrast, logical order, etc.) • Understand persuasive rhetorical strategies • Use transitions effectively <p>Exhibit knowledge of formal manuscript styles including MLA and APA and create citations accordingly.</p> <ul style="list-style-type: none"> • Use effective strategies for conclusion, avoiding simple restatement or introduction of new ideas <p>See GA Teacher Guidance pages 23-24 for specific guidance and academic vocabulary</p> <p>Teaching time: approximately 15 days</p>
<p>ELAGSE9-10W2: 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.</p>	<p>Skills/Concepts for Students:</p> <p>I can</p> <ul style="list-style-type: none"> • Construct a summary of a text without editorial bias • Understand the interplay and progression of multiple ideas within a single theme or topic <p>Distinguish important facts from extraneous details</p>

<p>a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.</p> <p>c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p> <p>d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.</p> <p>e. Establish and maintain an appropriate style and objective tone.</p> <p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>	<ul style="list-style-type: none"> • Format and structure expository essays for maximum clarity and impact, including effective use of transition words and phrases • Use academic and technical vocabulary effectively; use sophisticated syntax • Understand the rules of major manuscript styles such as MLA and APA, including appropriate use of correctly formatted citations <p>See GA Teacher Guidance pages 25-26 for specific guidance and academic vocabulary</p> <p>Teaching time: approximately 15 days</p>
--	---

<p>ELAGSE9-10W3: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p> <p>a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.</p> <p>b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.</p> <p>c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole.</p> <p>d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.</p>	<p>Skills/Concepts for Students:</p> <p>I can</p> <ul style="list-style-type: none"> • Know the elements of plot structure • Understand the elements of characterization • Use figurative language, imagery, sensory detail, and other literary devices to make stories realistic and engaging • Employ appropriate organizational structures to ensure cohesion in narratives • Use diction and syntax of appropriate sophistication for grade level, audience, and purpose <p>See GA Teacher Guidance page 27 for specific guidance and academic vocabulary</p> <p>Teaching time: approximately 15 days</p>
---	--

<p>e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	
<p>ELAGSE9-10W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Skills/Concepts for Students: I can</p> <ul style="list-style-type: none"> • Understand the elements of style in all genres of writing, including diction, syntax, tone, etc. (see sample writing rubrics for guidance) • Understand the appropriate use of transitional words and phrases • Use structure and organization for maximum clarity and effectiveness across all genres • Understand and employ correct grammar and conventions for the English language, varying diction/style as appropriate for audience and purpose • Maintain focus on audience and purpose • Accurately read and interpret writing prompt • Use appropriate tone by determining and respecting audience <p>See GA Teacher Guidance page 28 for specific guidance and academic vocabulary.</p> <p>This standard is on-going and is embedded within W1, W2 & W3 instruction.</p>
<p>ELAGSE9-10W5: 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. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grades 9–10.)</p>	<p>Skills/Concepts for Students: I can</p> <ul style="list-style-type: none"> • Cultivate the habit of drafting and revising major (and not so major) written work • Understand and employ effective strategies for editing and revising (revising by element, reading aloud, reviewing with peers, etc.) • Always review work for genre adherence (audience and purpose) and sharpen focus as appropriate • Acquire and review increasingly sophisticated knowledge of grammar and conventions and avoid errors • Engage in periodic self-reflection about writing growth <p>See GA Teacher Guidance page 29 for specific guidance and academic vocabulary.</p> <p>This standard is on-going and is embedded within W1, W2 & W3 instruction.</p>
<p>ELAGSE9-10W6: 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.</p>	<p>Skills/Concepts for Students: I can</p> <ul style="list-style-type: none"> • Proactively maintain knowledge of and use the latest digital trends for gathering and sharing information

	<ul style="list-style-type: none"> • Suggest new technologies for the classroom and encourage peers and instructors to explore new technologies • Acquire and maintain keyboarding skills adequate to produce text in the quantities and within the time limits required <p>Publish your work routinely, both to your classmates and digitally to the general public, including posting your films, blogs, podcasts, and Prezis and creating Wikis, websites, and other bases for others to access</p> <p>See GA Teacher Guidance page 30 for specific guidance and academic vocabulary.</p> <p>This standard is on-going and is embedded within W1, W2 & W3 instruction.</p>
<p>ELAGSE9-10W7: 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.</p>	<p>Skills/Concepts for Students:</p> <p>I can</p> <ul style="list-style-type: none"> • Understand the concept of plagiarism and avoid it; cite all source material accurately • Distinguish credible sources, whether digital or textual, from sources that are not credible or reliable • Be familiar with common manuscript styles, including MLA and APA, and format papers and citations appropriately • Routinely synthesize cited material, quotations, inferences, and other support into research, writing smoothly and coherently • Practice planning appropriately, adhering to goals and deadlines, and using research and writing time allotted efficiently <p>See GA Teacher Guidance page 31 for specific guidance and academic vocabulary.</p> <p>Teaching time: approximately 15 days</p>
<p>ELAGSE9-10W8: 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.</p>	<p>Skills/Concepts for Students:</p> <p>I can</p> <ul style="list-style-type: none"> • Practice maintaining appropriate focus in research, narrowing or broadening inquiry as appropriate, avoiding digression and ineffective sources/strategies • Understand the concept of plagiarism and avoid it; citing all source material accurately • Distinguish between relevant facts and extraneous facts or details • Distinguish credible sources, whether digital or textual, from sources that are not credible or reliable • Become familiar with common manuscript styles, including MLA and APA, and format papers and citations appropriately

	<p>See GA Teacher Guidance page 32 for specific guidance and academic vocabulary.</p> <p>This standard is on-going and is embedded within W7 instruction.</p>
<p>ELAGSE9-10W9: Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply grades 9–10 Reading standards to literature (e.g., “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]”).</p> <p>b. Apply grades 9–10 Reading standards to literary nonfiction (e.g., “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”).</p>	<p>Skills/Concepts for Students: I can</p> <ul style="list-style-type: none"> • Gain a deep understanding of the terms analysis and synthesis, and apply these parameters in responding intelligently to literature and informational text • Understand the literary elements that should be examined in a literary analysis essay (such as diction, syntax, tone, mood, imagery, figurative language) (• Understand the informational and rhetorical elements that should be examined in an informational analysis essay (such as diction, syntax, structure, logical fallacies, pathos, logos, ethos, peer review) • Distinguish theme(s) and trace development of theme through aggregation of facts, characters, events, etc. • Maintain the practice of requiring evidence and support for any claim presented and of provide evidence and support for the asserted claim <p>See GA Teacher Guidance page 33 for specific guidance and academic vocabulary.</p> <p>Teaching Time: approximately 15 days</p>
<p>ELAGSE9-10W10: 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.</p>	<p>Skills/Concepts for Students: I can</p> <ul style="list-style-type: none"> • Maintain a routine writing practice, both within the classroom and independently, experimenting with genre • Read and study writers whose styles you enjoy and admire, emulating stylistic elements useful to you • Acquire and maintain adequate keyboarding skills to write effectively within given time frames • Practice maintaining focus on prolonged projects, writing or working a little each day on a larger project over time • Maintain a portfolio of written work, not only for reflection but as a resource for ideas, work samples, college applications, etc. <p>See GA Teacher Guidance page 34 for specific guidance and academic vocabulary</p> <p>This standard is on-going and is embedded within W1, W2 & W3 instruction.</p>

Tenth Grade Literature and Composition Learning Targets and Timeline

Standard	Learning Target
<p>ELAGSE9-10RL1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Distinguish important details from irrelevant details • Recognize and select literary elements for analysis (such as diction, tone, imagery, figurative language, motif) • Draw inferences from the text to support textual analysis • Support all claims with textual evidence of how the text explicitly uses details to support key ideas • Use an appropriate organizational strategy to support textual annotations and analysis <p>* Refer to Teacher Guidance document page 4 Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RL2: Determine a theme or central idea of 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.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Distinguish main ideas from irrelevant details • Distinguish between the theme(s) of a text and the main idea of a text • Summarize without editorial bias (objective summary) • Exhibit knowledge of common literary devices and their applications • Analyze the development of a theme or idea through the use of literary devices and be able to articulate that development in both written and oral expression <p>* Refer to Teacher Guidance Document page 5 Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RL3: 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.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Identify and analyze the elements of characterization, including the character's actions, words, thoughts, appearance, and the thoughts, feelings, and actions of other characters towards that character (direct and indirect characterization) • Identify and analyze the elements of plot • Understand and identify differences between static and dynamic/flat and round characters • Analyze multiple motivations of characters who embody disparate characteristics <p>* Refer to Teacher Guidance document page 6 Approximate teaching time: 4-5 days</p>

<p>ELAGSE9-10RL4: 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).</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Accurately identify the tone of a text • Understand how specific instances of diction contribute to the identified tone of a text • Understand how other literary elements such as imagery and figurative language contribute to tone • Identify and analyze impact of various types of figurative language (e.g., metaphor, simile, personification, hyperbole, synecdoche, metonymy) • Identify and analyze impact of various sound devices (e.g., alliteration, assonance, consonance, onomatopoeia) <p>*Refer to Teacher Guidance document page 7 Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RL5: 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.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Recognize various structural formats of fictional texts (such as stanza, act, scene, chapter, stave) • Be able to accurately identify rhyme scheme and acquire an understanding of basic metrical formulas (for example, iambic pentameter) • Understand the elements of plot development (exposition, inciting incident, rising action, climax, falling action, resolution/ denouement) • Identify and understand the function of flashback, foreshadowing, beginning a narrative in media res, and other manipulations of time (e.g., parallel plot) • Analyze the impact of an author’s choice in disclosing narrative elements at a given point in a text <p>*Refer to Teacher Guidance document page 8 Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RI1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Distinguish important facts from irrelevant details • Think critically and analytically about text, making connections within a text and among texts • Recognize how important facts accrue to establish a main idea or prove a point • Make inferences and generalizations based on evidence from one or more reliable sources • Support all claims with evidence

	<ul style="list-style-type: none"> • Understand the concept of claim and counterclaim and audience as well as author bias <p>* Refer to Teacher Guidance document page 13 Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RI2: 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.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Distinguish important facts from irrelevant details • Distinguish between the theme of a text and the main idea of a text • Summarize without editorial bias (objective summary) • Analyze the way that facts accrue to support a thesis or hypothesis <p>Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RI3: 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.</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Understand and be able to identify common informational text types (e.g., abstract, lab notebook, diary, editorial) • Understand and apply the concept of text structures (e.g., chronological order, comparison, cause and effect, problem and solution) • Understand the concepts of author’s purpose and bias • Distinguish between important facts or supporting details and extraneous information • Note the differences in the types and quantity and quality of evidence and support required for claims in various formats and disciplines (for example, the evidence required in a letter to the editor may be scant and based on emotion, while the evidence required to advance an hypothesis in a scientific journal may be extensive) • Use an appropriate organizational strategy to support textual annotations and analysis <p>* Refer to Teacher Guidance document page 16 Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RI4: 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).</p>	<p>Skills/Concepts for Students: I can...</p> <ul style="list-style-type: none"> • Acquire or review foundational knowledge of roots, prefixes, suffixes, and other structural tools for decoding new vocabulary • Understand and apply

	<p>knowledge of the concepts of literal and figurative meaning</p> <ul style="list-style-type: none"> • Differentiate between situations that require formal diction and those that do not • Examine author’s purpose in word choice • Analyze the cumulative effect of diction on meaning and tone within a text <p>*Refer to Teacher Guidance document page 17</p> <p>Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RI5: 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)</p>	<p>Skills/Concepts for Students:</p> <p>I can...</p> <ul style="list-style-type: none"> • Acquire or review foundational knowledge of sentence structure, including phrases/clauses/compound/complex/compound-complex sentences • Understand the connotations of syntax and the impact of syntax on the reader (e.g., long and unnecessary complex sentences adversely impact clarity and the overuse of short, choppy sentences detracts from the mature, professional tone of a text). • Understand that diction and syntax may vary depending on audience and purpose • Acquire or review knowledge of informational text structures and headings (e.g., understand the purpose and placement of letters or diary entries in an epistolary memoir) <p>*Refer to Teacher Guidance document page 18</p> <p>Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10RI8: 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.</p>	<p>Skills/Concepts for Students:</p> <p>I can...</p> <ul style="list-style-type: none"> • Distinguish important facts from extraneous details • Use the concepts of inductive and deductive reasoning and syllogism (major and minor premise = conclusion) in argument analysis • Consistently and readily identify logical fallacies as well as reliable and well-supported arguments • Recognize editorial bias in the writings of others • Understand the various purposes of rhetoric, both positive and negative (e.g., propaganda, misinformation, and inspiration) • Acquire or review knowledge of rhetorical strategies and appeals (such as pathos, logos, and ethos)

	<ul style="list-style-type: none"> • Understand the functions of diction, syntax, organizational structure, and other literary elements of a powerful, persuasive argument <p>*Refer to Teacher Guidance document page 22</p> <p>Approximate teaching time: 4-5 days</p>
<p>ELAGSE9-10W1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p> <p>a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.</p> <p>b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level and concerns.</p> <p>c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.</p> <p>d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</p> <p>e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p>Skills/Concepts for Students:</p> <p>I can...</p> <ul style="list-style-type: none"> • Consistently distinguish supporting evidence from repetition or extraneous detail • Consistently distinguish valid reasoning from logical fallacy • Understand what comprises sufficient evidence based on the nature of argument or claim • Address audience bias and counterclaims • Write with appropriate organizational structure for argument or claim (comparison/contrast, logical order, etc.) • Understand and effectively employ persuasive rhetorical strategies • Use transitions effectively • Exhibit knowledge of formal manuscript styles including MLA and APA and create citations accordingly <ul style="list-style-type: none"> • Use effective strategies for conclusion, avoiding simple restatement or introduction of new ideas <p>*Refer to Teacher Guidance document page 25</p> <p>Anticipated teaching time 7-10 (based on more intensive instruction in 9th grade)</p>
<p>ELAGSE9-10W2: 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.</p> <p>a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.</p> <p>b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic.</p> <p>c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.</p>	<p>Skills/Concepts for Students:</p> <p>I can...</p> <ul style="list-style-type: none"> • Determine formal style and objective tone while attending to the norms and conventions of informative/explanatory texts • Understand the interplay and progression of multiple ideas within a single theme or topic and practice weaving multiple complementary ideas together in your own writing • Consistently distinguish important facts from extraneous details • Format and structure informative/expository essays for maximum clarity and impact, including effective use of transition words and phrases • Use academic and technical vocabulary effectively; use sophisticated syntax • Understand the rules of major manuscript styles such as <i>MLA and APA</i>, including appropriate use of correctly formatted citations

<p>d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.</p> <p>e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.</p> <p>f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).</p>	<p>* Refer to Teacher Guidance document page 27</p> <p>Anticipated teaching time 7-10 (based on more intensive instruction in 9th grade)</p>
<p>ELAGSE9-10W3: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p> <p>a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.</p> <p>b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.</p> <p>c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole.</p> <p>d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.</p> <p>e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	<p>Skills/Concepts for Students:</p> <p>I can...</p> <ul style="list-style-type: none"> • Know and be able to identify the elements of plot structure • Understand and be able to identify the elements of characterization • Be able to effectively use figurative language, imagery, sensory detail, and other literary devices to make stories realistic and engaging • Employ appropriate organizational structures to ensure coherence in narratives • Use diction and syntax of appropriate sophistication for grade level, audience, and purpose <p>* Refer to Teacher Guidance document page 29</p> <p>Anticipated teaching time 7-10 (based on more intensive instruction in 9th grade)</p>

PACING CHART 10th Grade

Order of Progression/Complementary Writing	POWER STANDARDS RL/RI Standards
<p>W1 - Argumentative Writing</p>	<p>RI1 RL4 RI5 RI8</p>
<p>W2 - Expository/Informational</p>	<p>RI1 RI2 RI3 RI4</p>
<p>W3 - Narrative</p>	<p>RL1 RL2 RL3 RL4 RL5</p>
	<p>* Can teach RL standards along the way with the RI standards, but those listed are predominate with the style of writing.</p>

11th Grade American Literature and Composition Learning Targets and Timeline

Learning Target	Power Standards	Estimated Time
<p>ELAGSE11-12RI4: 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.)</p>	<p><i>I can use strategies to determine meanings of words/phrases, including word roots.</i></p> <ul style="list-style-type: none"> • <i>I can identify elements of language and style (imagery, symbolism)</i> • <i>I can analyze an author’s use of rhetorical strategies</i> • <i>I can analyze the effect of diction/imagery on meaning (images, figurative language, metaphor, understatement, metaphor, irony, paradox, tone)</i> • <i>I can identify figurative language</i> • <i>I know the difference between figurative language, idiomatic language and poetic (sound) devices</i> 	<p>2-3 days</p>
<p>ELAGSE11-12RI4: 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).</p>	<p><i>I can determine and analyze the meaning of words and phrases.</i></p> <ul style="list-style-type: none"> • <i>Identify and explain the structure and elements of a work</i> • <i>Evaluate how author’s diction advances theme or purpose of a work</i> • <i>Analyze the logic and evidence of a work</i> • <i>Identify and use the Rhetorical triangle</i> • <i>Analyze and apply style, syntax, and rhetorical techniques in works</i> • <i>Decode unknown language using roots, prefixes, suffixes and patterns</i> • <i>Distinguish between literal and figurative meaning (satire, irony)</i> • <i>Use formal and informal language appropriately</i> • <i>Analyze purpose in diction</i> • <i>Analyze the effect of diction on meaning</i> 	<p>2-3 days</p>
<p>ELAGSE11-12RL5: 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</p>	<p><i>I can analyze how an author structures a text.</i> <i>Identify plot structure</i></p> <ul style="list-style-type: none"> • <i>Find and analyze structure in a work (chronological order, in media res, flashback, frame narrative, epistolary narrative)</i> • <i>Identify structural strategies (open form/free verse, discontinuous narrative, juxtaposition/combination of themes, in textuality, extensive use of classical allusions, extensive figurative language, sharing of themes, language and cultural ideas)</i> 	

	<ul style="list-style-type: none"> • <i>Identify the function of literary techniques (flashback, foreshadowing, in media res)</i> • <i>Identify rhyming scheme and basic metrical formulas in poetry</i> • <i>Analyze author’s choice using narrative elements</i> 	
<p>ELAGSE11-12RI5: 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.</p>	<p><i>I can analyze how an author structures a text for clarity and effect.</i></p> <ul style="list-style-type: none"> • <i>Identify text structures (abstract, a precis, chronological order, compare/contrast, order of importance)</i> • <i>Identify rhetorical strategies (logical fallacies, ethos, logos, pathos, tone, irony, parallel structure, diction, organization)</i> • <i>Identify the structure of nonfiction works (letters, journals, diaries, speeches, essays)</i> • <i>Analyze the logic and evidence in a work</i> • <i>Analyze how authors use language, style, syntax and rhetorical devices for purpose</i> • <i>Demonstrate sentence structure knowledge (phrases, clauses, compound, complex, compound/complex)</i> • <i>Identify and analyze impact of syntax on reader depending on author’s purpose</i> • <i>Use text features (in-text citations, footnotes, glossaries, etc.)</i> 	
<p>ELAGSE11-12RL6: 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).</p>	<p><i>I can analyze satire, sarcasm, irony, or understatement in a text.</i></p> <ul style="list-style-type: none"> • <i>Analyze figurative language in works of satire and irony</i> • <i>Compare style and language in multicultural works</i> • <i>Analyze the effect of diction and imagery in meaning (images, figurative language, metaphor, understatement, hyperbole, irony, paradox, tone)</i> • <i>Compare modern satire to classical satire</i> • <i>Practice using and identifying nuanced language</i> • <i>Annotate figurative construction in a work</i> • <i>Build vocabulary for meaning</i> 	
<p>ELAGSE11-12RI6: 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</p>	<p><i>I can determine an author’s purpose in a text and analyze content, style, and impact.</i></p> <ul style="list-style-type: none"> • <i>I can understand and readily identify rhetorical strategies, such as appeals to emotion or authority, syllogism, and logical fallacies.</i> 	

<p>to the power, persuasiveness, or beauty of the text.</p>	<ul style="list-style-type: none"> • <i>I can determine the effectiveness of an argument/exposition by understanding and applying knowledge of diction, syntax, tone, imagery, figurative language, and other elements.</i> • <i>I can identify the power of the author’s language in terms of creating a text that engages the reader.</i> • <i>I can identify author’s biases, both subtle and overt, including implicit or explicit assumptions.</i> • <i>I can analyze and evaluate the logic and use of evidence in an author’s argument.</i> • <i>I can identify author’s biases, both subtle and overt, and make considered decisions regarding the validity of a claim or appeal.</i> • <i>I can distinguish between a powerful argument and a valid argument (not all valid arguments are powerful and vice versa).</i> • <i>I can determine an author’s or speaker’s point of view, even when it is not explicitly stated.</i> 	
<p>ELAGSE11-12RL7: 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 as well as one play by an American</p>	<p><i>I can analyze the impact of multiple interpretations of story, drama, or poem.</i></p> <ul style="list-style-type: none"> • <i>Analyze the influence of myth, traditional and classic literature on American Literature</i> • <i>Compare texts using universal themes across genres</i> • <i>Compare versions of texts in various formats</i> • <i>Use appropriate literary terminology for literary review (diction, syntax, angle, perspective, etc.)</i> • <i>Analyze author’s edits in a work for impact</i> 	
<p>ELAGSE11-12RI7: 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.</p>	<p><i>I can evaluate multiple sources of information in order to solve a problem.</i></p> <ul style="list-style-type: none"> • <i>I can analyze and explain the structures and elements of nonfiction works of American literature (e.g., letters, journals, diaries, speeches, and essays).</i> • <i>I can interpret images in a sophisticated, analytic, and thoughtful manner.</i> 	
<p>ELAGSE11-12RL9: Demonstrate knowledge of eighteenth-, nineteenth- and early twentieth century foundational</p>	<p><i>I can demonstrate how American Literature addresses themes or topics.</i></p> <ul style="list-style-type: none"> • <i>Analyze modern literature trends to historical American Literature trends</i> 	

<p>works (of American Literature, British Literature, World Literature, or Multicultural Literature), including how two or more texts from the same period treat similar themes or topics.</p>	<ul style="list-style-type: none"> • <i>Analyze influence of style and techniques on literature</i> • <i>Explain how tone, mood, diction, syntax and plot elements add up to reveal themes</i> • <i>Use appropriate vocabulary to analyze text</i> • <i>Explore background (author/context/history) of a given work.</i> • <i>Summarize setting, plot, characterization, other narrative elements to determine meaning.</i> • <i>Identify literary periods, major works and authors.</i> 	
<p>ELAGSE11-12RI9: Analyze 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. For British Literature, American Literature, and Multicultural Literature use comparable documents of historical significance.</p>	<p><i>I can analyze foundational U.S documents for theme, purpose, and rhetorical features.</i></p> <ul style="list-style-type: none"> • <i>Analyze structure and elements of a work (letters, journals, diaries, speeches, essays)</i> • <i>Analyze logic and evidence in an argument</i> • <i>Analyze and use the ways authors use language, style, syntax, rhetorical strategies</i> • <i>Use inductive/deductive reasoning and syllogism in analysis</i> • <i>Identify logical fallacies in arguments</i> • <i>Understand use of rhetoric (propaganda, misinformation, inspiration)</i> • <i>Use classical reasoning (ethos, pathos, logos)</i> • <i>Use claims, counterclaims to influence audience, recognize bias</i> • <i>Use diction, syntax, organizational structure, literary elements in persuasive and argumentative works</i> 	
<p>ELAGSE11-12W1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths</p>	<p><i>I can write arguments to support claims using valid reasoning and relevant/sufficient evidence.</i></p> <ul style="list-style-type: none"> • <i>I can introduce precise and knowledgeable claims</i> • <i>I can establish the significance of a claim</i> • <i>I can distinguish between claims</i> • <i>I can create an essay</i> • <i>I can develop claims and counterclaims</i> • <i>I can link major sections of text to clarify relationships between claims and counterclaims; reasons and evidence.</i> • <i>I can establish and maintain a formal style and tone in my writing</i> • <i>I can provide a concluding statement that supports an argument</i> 	

<p>and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.</p>		
<p>ELAGSE11-12W2: 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. a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as</p>	<p><i>I can choose and use content in order to write informative and explanatory text.</i></p> <ul style="list-style-type: none"> • <i>I can introduce a topic, organize complex ideas, and properly format</i> • <i>I can select relevant facts, definitions, details, quotations, and information appropriate to topic</i> • <i>I can use appropriate and varied transitions</i> • <i>I can use precise language, vocabulary, figures of speech and analogy</i> • <i>I can establish and maintain a formal style and objective tone</i> • <i>I can provide a concluding statement or paragraph</i> 	

<p>metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic)</p>		
<p>ELAGSE11-12W3: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	<p><i>I can structure events in detail to write a narrative.</i></p> <ul style="list-style-type: none"> • I can orient the reader by introducing a problem, establishing one or multiple point-of-view(s), introduce a narrator and/or characters, and create a smooth progression of events. • I can analyze the progression of multiple ideas within a single theme. • I can weave multiple complimentary ideas together. • I can choose the best structure for maximum clarity and impact. • I can use precise words, phrases, details, and sensory language • I can provide a conclusion that follows the course of a narrative. 	

12th Grade Advanced Composition Learning Targets and Timeline

Learning Target	Power Standards	Estimated Time
<p>ELAGSE11-12W1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience’s knowledge level, concerns, values, and possible biases. c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. e. Provide a concluding statement or section that follows from and supports the argument presented.</p>	<p><i>I can write arguments to support claims using valid reasoning and relevant/sufficient evidence.</i></p> <ul style="list-style-type: none"> • <i>I can introduce precise and knowledgeable claims</i> • <i>I can establish the significance of a claim</i> • <i>I can distinguish between claims</i> • <i>I can create an essay</i> • <i>I can develop claims and counterclaims</i> • <i>I can link major sections of text to clarify relationships between claims and counterclaims; reasons and evidence.</i> • <i>I can establish and maintain a formal style and tone in my writing</i> • <i>I can provide a concluding statement that supports an argument</i> 	
<p>ELAGSE11-12W2: 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. a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified</p>	<p><i>I can choose and use content in order to write informative and explanatory text.</i></p> <ul style="list-style-type: none"> • <i>I can introduce a topic, organize complex ideas, and properly format</i> • <i>I can select relevant facts, definitions, details, quotations, and information appropriate to topic</i> • <i>I can use appropriate and varied transitions</i> 	

<p>whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience’s knowledge of the topic. c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic. e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic)</p>	<ul style="list-style-type: none"> • <i>I can use precise language, vocabulary, figures of speech and analogy</i> • <i>I can establish and maintain a formal style and objective tone</i> • <i>I can provide a concluding statement or paragraph</i> 	
<p>ELAGSE11-12W3: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of</p>	<p><i>I can orient the reader by introducing a problem, establishing one or multiple point-of-view(s), introduce a narrator and/or characters, and create a smooth progression of events.</i></p> <ul style="list-style-type: none"> • <i>I can analyze the progression of multiple ideas within a single theme.</i> • <i>I can weave multiple complimentary ideas together.</i> • <i>I can choose the best structure for maximum clarity and impact.</i> • <i>I can use precise words, phrases, details, and sensory language</i> 	

<p>techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	<ul style="list-style-type: none"> • <i>I can provide a conclusion that follows the course of a narrative.</i> 	
<p>ELAGSE11-12W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<ul style="list-style-type: none"> • <i>I can write clearly using diction, syntax and tone.</i> • <i>I can understand and effectively use transitional words and phrases.</i> • <i>I can use structure and organization maintaining a focus and point-of-view.</i> • <i>I can effectively use grammar and conventions.</i> • <i>Support statements/claims with anecdotes, descriptions, facts, statistics, and specific examples.</i> 	
<p>ELAGSE11-12W5: 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. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grades 11-12.)</p>	<ul style="list-style-type: none"> • <i>I can use the writing process to develop and strengthen my writing.</i> 	
<p>ELAGSE11-12W6: 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.</p>	<ul style="list-style-type: none"> • <i>I can use technology to produce, publish, and share writing products.</i> 	
<p>ELAGSE11-12W7: Conduct short as well as more sustained</p>	<ul style="list-style-type: none"> • <i>I can conduct research projects to answer questions,</i> 	

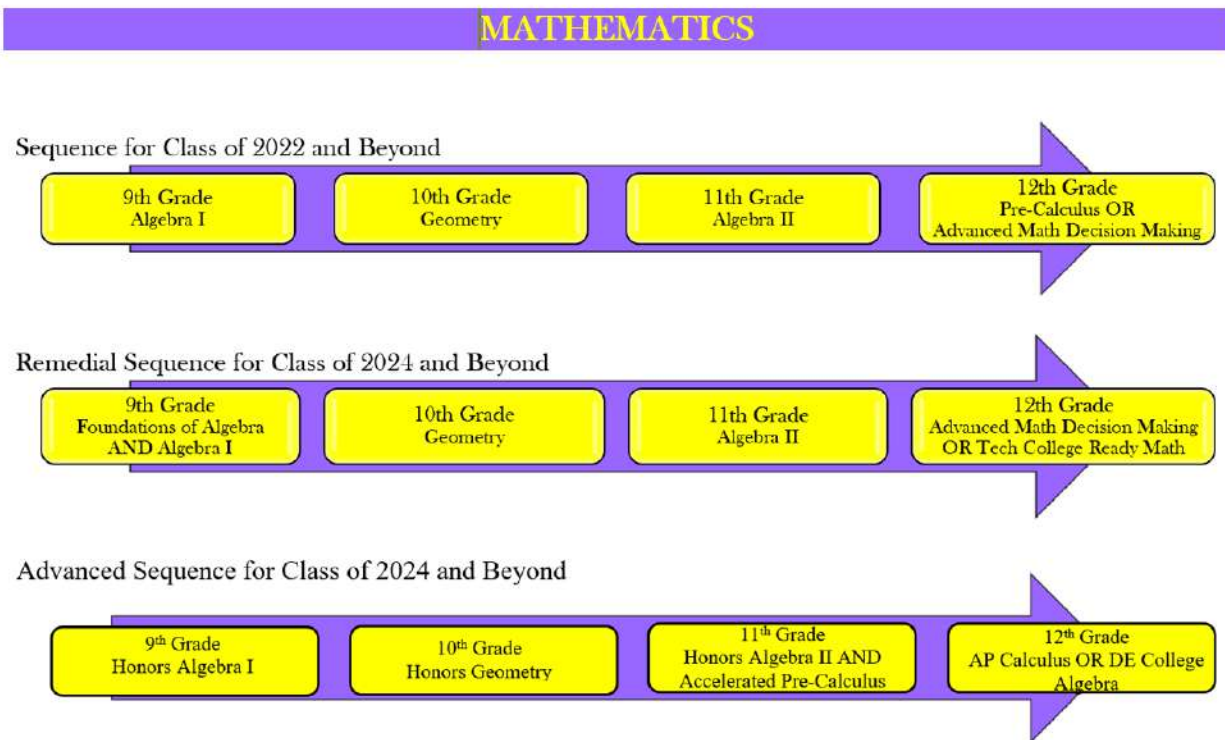
<p>research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</p>	<p><i>broaden inquiry synthesize multiple sources demonstrating understanding of the subject under investigation.</i></p>	
<p>ELAGSE11-12W8: 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.</p>	<ul style="list-style-type: none"> • <i>I can gather relevant information from a variety of print and digital sources.</i> • <i>I can use advanced searches effectively.</i> • <i>I can access the strengths and limitations of each source in terms of the task, purpose, and audience.</i> • <i>I can integrate information into the text to maintain flow of ideas.</i> • <i>I can avoid plagiarism and overreliance on any one source.</i> • <i>I can follow the standard format for citation.</i> 	
<p>ELAGSE11-12W9: Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grades 11–12 Reading standards to literature (e.g., “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”). b. Apply grades 11–12 Reading standards to literary nonfiction (e.g., “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 Case majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The</p>	<ul style="list-style-type: none"> • <i>I can apply grades 11-12 Reading Standards to literature</i> • <i>I can apply grades 11-12 Reading Standards to literary nonfiction</i> 	

Federalist, presidential addresses]”).		
ELAGSE11-12W10: 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.	<ul style="list-style-type: none"> • <i>I can write routinely over extended and shorter time frames for a range of tasks, purposes, and audiences.</i> 	

Mathematics

From the Georgia Department of Education (GaDOE; 2016):

The Georgia Mathematics Curriculum focuses on actively engaging the students in the development of mathematical understanding by using manipulatives and a variety of representations, working independently and cooperatively to solve problems, estimating and computing efficiently, and conducting investigations and recording findings. There is a shift towards applying mathematical concepts and skills in the context of authentic problems and for the student to understand concepts rather than merely follow a sequence of procedures. In mathematics classrooms, students will learn to think critically in a mathematical way with an understanding that there are many different ways to a solution and sometimes more than one right answer in applied mathematics. Mathematics is the economy of information. The central idea of all mathematics is to discover how knowing some things well, via reasoning, permit students to know much else—without having to commit the information to memory as a separate fact. It is the connections, the reasoned, logical connections that make mathematics coherent. As a result, implementation of Georgia Standards of Excellence places a greater emphasis on problem solving, reasoning, representation, connections, and communication.



Foundations of Algebra
More information coming soon

Course Outline: GSE FOA

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Number Sense and Quantity	Arithmetic to Algebra	Proportional Reasoning	Equations and Inequalities	Quantitative Reasoning with Functions
3 weeks	4 weeks	3 weeks	4 weeks	4 weeks

Algebra I

Proficiency Scale	Standard	# of Days
Rational Numbers and Expressions	<p>MGSE9-12.N.RN.2 Rewrite expressions involving radicals and rational exponents using the properties of exponents. (i.e., simplify and/or use the operations of addition, subtraction, and multiplication, with radicals within expressions limited to square roots).</p> <p>MGSE9-12.N.RN.3 Explain why the sum or product of rational numbers is rational; why the sum of a rational number and an irrational number is irrational; and why the product of a nonzero rational number and an irrational number is irrational</p>	5
Adding, Subtracting, and Multiplying Polynomials	MGSE9-12.A.APR.1 Add, subtract, and multiply polynomials; understand that polynomials form a system analogous to the integers in that they are closed under these operations.	3
Components of an Expression	<p>MGSE9-12.A.SSE.1 Interpret expressions that represent a quantity in terms of its context.</p> <p>MGSE9-12.A.SSE.1a Interpret parts of an expression, such as terms, factors, and coefficients, in context.</p> <p>MGSE9-12.F.LE.5 Interpret the parameters in a linear ($f(x) = mx + b$) and exponential ($f(x) = a \cdot dx$) function in terms of context. (In the functions above, “m” and “b” are the parameters of the linear function, and “a” and “d” are the parameters of the exponential function.) In context, students should describe what these parameters mean in terms of change and starting value.</p>	2
Context of an Expression	<p>MGSE9-12.A.SSE.1 Interpret expressions that represent a quantity in terms of its context.</p> <p>MGSE9-12.A.SSE.1b Given situations which utilize formulas or expressions with multiple terms and/or factors, interpret the meaning (in context) of individual terms or factors.</p> <p>MGSE9-12.N.Q.1 Use units of measure (linear, area, capacity, rates, and time) as a way to understand problems:</p> <p>MGSE9-12.N.Q.1a. Identify, use, and record appropriate units of measure within context, within data displays, and on graphs;</p> <p>MGSE9-12.N.Q.1b. Convert units and rates using dimensional analysis (English-to-English and Metric-to-Metric without conversion factor provided and between English and Metric with conversion factor);</p> <p>MGSE9-12.N.Q.1c. Use units within multi-step problems and formulas; interpret units of input and resulting units of output.</p> <p>MGSE9-12.N.Q.2 Define appropriate quantities for the purpose of descriptive modeling. Given a situation, context, or problem, students will determine, identify, and use appropriate quantities for representing the situation.</p> <p>MGSE9-12.N.Q.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. For example, money situations are generally reported to the nearest cent (hundredth). Also, an answers’ precision is limited to the precision of the data given.</p>	6

	MGSE9-12.A.CED.4 Rearrange formulas to highlight a quantity of interest using the same reasoning as in solving equations. Examples: Rearrange Ohm’s law $V = IR$ to highlight resistance R ; Rearrange area of a circle formula $A = \pi r^2$ to highlight the radius r .	
Linear Equations and Inequalities	MGSE9-12.A.REI.10 Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane. MGSE9-12.A.REI.12 Graph the solution set to a linear inequality in two variables.	2
Equations and Inequalities	MGSE9-12.A.REI.1 Using algebraic properties and the properties of real numbers, justify the steps of a simple, one-solution equation. Students should justify their own steps, or if given two or more steps of an equation, explain the progression from one step to the next using properties. MGSE9-12.A.REI.3 Solve linear equations and inequalities in one variable including equations with coefficients represented by letters. For example, given $ax + 3 = 7$, solve for x .	2
Generating Equations and Inequalities	MGSE9-12.A.CED.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear, quadratic, and exponential functions (integer inputs only). MGSE9-12.F.BF.1 Write a function that describes a relationship between two quantities. MGSE9-12.F.BF.1a Determine an explicit expression and the recursive process (steps for calculation) from context. For example, if Jimmy starts out with \$15 and earns \$2 a day, the explicit expression “ $2x+15$ ” can be described recursively (either in writing or verbally) as “to find out how much money Jimmy will have tomorrow, you add \$2 to his total today.” MGSE9-12.A.CED.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret data points as possible (i.e. a solution) or not possible (i.e. a non-solution) under the established constraints	4
Systems of Equations and Inequalities	MGSE9-12.A.CED.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret data points as possible (i.e. a solution) or not possible (i.e. a non-solution) under the established constraints. MGSE9-12.A.REI.5 Show and explain why the elimination method works to solve a system of two-variable equations. MGSE9-12.A.REI.6 Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. MGSE9-12.A.REI.11 Using graphs, tables, or successive approximations, show that the solution to the equation $f(x) = g(x)$ is the x -value where the y -values of $f(x)$ and $g(x)$ are the same.	5
Functional Relationships and Function Notation	MGSE9-12.F.IF.1 Understand that a function from one set (the input, called the domain) to another set (the output, called the range) assigns to each element of the domain exactly one element of the range, i.e. each input value maps to exactly one output value. If f is a function, x is the input (an element of the domain), and $f(x)$ is	2

	<p>the output (an element of the range). Graphically, the graph is $y = f(x)$.</p> <p>MGSE9-12.F.IF.2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</p>	
Domain and Range of Functions	<p>MGSE9-12.F.IF.1 Understand that a function from one set (the input, called the domain) to another set (the output, called the range) assigns to each element of the domain exactly one element of the range, i.e. each input value maps to exactly one output value. If f is a function, x is the input (an element of the domain), and $f(x)$ is the output (an element of the range). Graphically, the graph is $y = f(x)$.</p> <p>MGSE9-12.F.IF.5 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function $h(n)$ gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.</p>	3
Factoring Expressions	<p>MGSE9-12.A.SSE.2 Use the structure of an expression to rewrite it in different equivalent forms. For example, see $x^3 - y^3$ as $(x - y)(x^2 + xy + y^2)$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$</p>	5
Quadratic Equations and Functions	<p>MGSE9-12.A.REI.4 Solve quadratic equations in one variable.</p> <p>MGSE9-12.A.REI.4a Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from $ax^2 + bx + c = 0$.</p> <p>MGSE9-12.A.REI.4b Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, factoring, completing the square, and the quadratic formula, as appropriate to the initial form of the equation (limit to real number solutions)</p> <p>MGSE9-12.A.SSE.3a Factor any quadratic expression to reveal the zeros of the function defined by the expression.</p> <p>MGSE9-12.A.SSE.3b Complete the square in a quadratic expression to reveal the maximum or minimum value of the function defined by the expression.</p> <p>MGSE9-12.F.IF.7a Graph linear and quadratic functions and show intercepts, maxima, and minima (as determined by the function or by context).</p> <p>MGSE9-12.F.IF.8a Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. For example, compare and contrast quadratic functions in standard, vertex, and intercept forms.</p>	7
Graphing Functions	<p>MGSE9-12.F.IF.7 Graph functions expressed algebraically and show key features of the graph both by hand and by using technology.</p> <p>MGSE9-12.F.IF.7a Graph linear and quadratic functions and show intercepts, maxima, and minima (as determined by the function or by context).</p> <p>MGSE9-12.F.IF.7e Graph exponential functions, showing intercepts and end behavior.</p>	6

	<p>MGSE9-12.F.BF.3 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.</p>	
Generating Functions	<p>MGSE9-12.F.BF.1 Write a function that describes a relationship between two quantities.</p> <p>MGSE9-12.F.BF.1a Determine an explicit expression and the recursive process (steps for calculation) from context. For example, if Jimmy starts out with \$15 and earns \$2 a day, the explicit expression “$2x+15$” can be described recursively (either in writing or verbally) as “to find out how much money Jimmy will have tomorrow, you add \$2 to his total today.”</p> <p>MGSE9-12.A.CED.2 Create linear, quadratic, and exponential equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. (The phrase “in two or more variables” refers to formulas like the compound interest formula, in which $A = P(1 + r/n)^{nt}$ has multiple variables.)</p>	3
Comparing Functions	<p>MGSE9-12.F.IF.4 Using tables, graphs, and verbal descriptions, interpret the key characteristics of a function which models the relationship between two quantities. Sketch a graph showing key features including: intercepts; interval where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior;</p> <p>MGSE9-12.F.IF.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a graph of one function and an algebraic expression for another, say which has the larger maximum.</p> <p>MGSE9-12.F.LE.1 Distinguish between situations that can be modeled with linear functions and with exponential functions.</p> <p>MGSE9-12.F.LE.1a Show that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals. (This can be shown by algebraic proof, with a table showing differences, or by calculating average rates of change over equal intervals).</p> <p>MGSE9-12.F.LE.1b Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.</p> <p>MGSE9-12.F.LE.1c Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.</p> <p>MGSE9-12.F.LE.3 Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.</p> <p>MGSE9-12.F.IF.6 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.</p>	3

Arithmetic and Geometric Sequences	<p>MGSE9-12.F.IF.3 Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. (Generally, the scope of high school math defines this subset as the set of natural numbers 1,2,3,4...) By graphing or calculating terms, students should be able to show how the recursive sequence $a_1=7, a_n=a_{n-1} + 2$; the sequence $s_n = 2(n-1) + 7$; and the function $f(x) = 2x + 5$ (when x is a natural number) all define the same sequence.</p> <p>MGSE9-12.F.BF.2 Write arithmetic and geometric sequences recursively and explicitly, use them to model situations, and translate between the two forms. Connect arithmetic sequences to linear functions and geometric sequences to exponential functions.</p> <p>MGSE9-12.F.LE.2 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).</p>	3
Algebraic Data Representation	<p>MGSE9-12.S.ID.6 Represent data on two quantitative variables on a scatter plot and describe how the variables are related.</p> <p>MGSE9-12.S.ID.6a Decide which type of function is most appropriate by observing graphed data, charted data, or by analysis of context to generate a viable (rough) function of best fit. Use this function to solve problems in context. Emphasize linear, quadratic and exponential models.</p> <p>MGSE9-12.S.ID.6c Using given or collected bivariate data, fit a linear function for a scatter plot that suggests a linear association.</p> <p>MGSE9-12.S.ID.8 Compute (using technology) and interpret the correlation coefficient “r” of a linear fit. (For instance, by looking at a scatterplot, students should be able to tell if the correlation coefficient is positive or negative and give a reasonable estimate of the “r” value.) After calculating the line of best fit using technology, students should be able to describe how strong the goodness of fit of the regression is, using “r”.</p> <p>MGSE9-12.S.ID.7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.</p>	4
Data Comparisons	<p>MGSE9-12.S.ID.9 Distinguish between correlation and causation.</p> <p>MGSE9-12.S.ID.1 Represent data with plots on the real number line (dot plots, histograms, and box plots).</p> <p>MGSE9-12.S.ID.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, mean absolute deviation, standard deviation) of two or more different data sets.</p> <p>MGSE9-12.S.ID.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</p> <p>MGSE9-12.S.ID.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.</p>	5

Geometry

Proficiency Scale	Standards	# of days
Rigid Transformations.	<p>MGSE9-12.G.CO.4 Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.</p> <p>MGSE9-12.G.CO.6 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.</p> <p>MGSE9-12.G.CO.3 Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.</p> <p>MGSE9-12.G.CO.5 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.</p>	8
Non rigid transformation: Dilation.	<p>MGSE9-12.G.SRT.1 Verify experimentally the properties of dilations given by a center and a scale factor.</p> <p>a. The dilation of a line not passing through the center of the dilation results in a parallel line and leaves a line passing through the center unchanged.</p> <p>b. The dilation of a line segment is longer or shorter according to the ratio given by the scale factor.</p>	2
Vertical angles and angles made by transversal of parallel lines.	<p>MGSE9-12.G.CO.9 Prove theorems about lines and angles.</p> <p>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</p>	3
Similarity and congruence in triangles.	<p>MGSE9-12.G.CO.7 Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.</p> <p>MGSE9-12.G.CO.8 Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. (Extend to include HL and AAS.)</p> <p>MGSE9-12.G.SRT.3 Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.</p> <p>MGSE9-12.G.SRT.4 Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, (and its converse); the Pythagorean Theorem using triangle similarity.</p> <p>MGSE9-12.G.SRT.2 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.</p> <p>MGSE9-12.G.SRT.5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.</p>	5
Triangle properties:	<p>MGSE9-12.G.CO.9 Prove theorems about lines and angles.</p> <p>Theorems include: vertical angles are congruent; when a transversal crosses</p>	5

<p>Proportionality theorem, mid segment theorem, base angles of an isosceles triangle are congruent.</p>	<p>parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</p> <p>MGSE9-12.G.CO.10 Prove theorems about triangles.</p> <p>Theorems include: measures of interior angles of a triangle sum to 180 degrees; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</p> <p>MGSE9-12.G.SRT.4 Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, (and its converse); the Pythagorean Theorem using triangle similarity.</p>	
<p>Trigonometric ratios and their applications.</p>	<p>MGSE9-12.G.SRT.6 Understand 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.</p> <p>MGSE9-12.G.SRT.7 Explain and use the relationship between the sine and cosine of complementary angles.</p> <p>MGSE9-12.G.SRT.8 Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.</p>	6
<p>Properties of parallelogram.</p>	<p>MGSE9-12.G.CO.8 Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions. (Extend to include HL and AAS.)</p> <p>MGSE9-12.G.CO.9 Prove theorems about lines and angles.</p> <p>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</p> <p>MGSE9-12.G.CO.11 Prove theorems about parallelograms.</p> <p>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.</p>	2
<p>Components of a circle.</p>	<p>MGSE9-12.G.CO.1 Know 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.</p> <p>MGSE9-12.G.CO.4 Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.</p> <p>MGSE9-12.G.CO.12 Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line</p> <p>MGSE9-12. G.C.1 Understand that all circles are similar.</p> <p>MGSE9-12. G.C.2 Identify and describe relationships among inscribed angles, radii, chords, tangents, and secants. 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.</p> <p>MGSE9-12. G.C.4 Construct a tangent line from a point outside a given circle to the circle.</p>	6

Angles of a circle: Central angle and inscribed angle.	MGSE9-12.G.CO.1 Know 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. MGSE9-12.G.C.2 Identify and describe relationships among inscribed angles, radii, chords, tangents, and secants. 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.	5
Circumscribed and inscribed circles of triangles.	MGSE9-12.G.C.2 Identify and describe relationships among inscribed angles, radii, chords, tangents, and secants. 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. MGSE9-12.G.C.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle. MGSE9-12.G.CO.12 Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.	3
Proportions of a circle; Arc length and area of a circle.	MGSE9-12.G.GMD.1 Give informal arguments for geometric formulas. a. Give informal arguments for the formulas of the circumference of a circle and area of a circle using dissection arguments and informal limit arguments. MGSE9-12.G.C.5 Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.	4
Equation of a circle.	MGSE9-12.G.GPE.1 Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation	3
Circle polygon constructions: Construction of an equilateral triangle, a square, and a regular hexagon, each inscribed in a circle.	MGSE9-12.G.CO.13 Construct an equilateral triangle, a square, and a regular hexagon, each inscribed in a circle.	4
Volume of solids	MGSE9-12.G.GMD.1 Give informal arguments for geometric formulas. a. Give informal arguments for the formula of the volume of a cylinder, pyramid, and cone using Cavalieri's principle. MGSE9-12.G.GMD.2 Give an informal argument using Cavalieri's principle for the formulas for the volume of a sphere and other solid figures. MGSE9-12.G.GMD.3 Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	4

Analyzing geometry figure,	<p>MGSE9-12.G.MG.1 Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).</p> <p>MGSE9-12.G.MG.2 Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).</p> <p>MGSE9-12.G.GMD.4 Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.</p> <p>MGSE9-12.G.MG.3 Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).</p>	2
Partitions of line segments, distance formula and mid point.	<p>G.GPE.6—Partition line segments in a given ratio (for example, when given the endpoints of a line segment, determine the coordinates of the point that partitions the line segment in a given ratio).</p> <p>G.CO.9—Determine the location of the point which bisects a line segment (for example, given the coordinates of the endpoints of a line segment, determine the coordinates of the point which bisects that line segment).</p>	3
Polygons in coordinate plane:	<p>MGSE9-12.G.GPE.4 Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0,2)$. (Focus on quadrilaterals, right triangles, and circles.)</p> <p>MGSE9-12.G.GPE.5 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).</p> <p>MGSE9-12.G.GPE.7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.</p>	8
Line and angle constructions: Construction of perpendicular bisector, angle bisector and parallel line.	<p>G.CO.12—Explain a construction of parallel lines (for example, explain the justification behind each step of a compass construction of parallel lines by reasoning about the angle properties of a rhombus, the angle properties of parallel lines crossed by a transversal, or the side lengths and angles of congruent triangles).</p> <p>G.CO.12—Explain a construction of a perpendicular bisector (for example, explain the justification behind each step of a compass construction of the perpendicular bisector of a given line segment by reasoning about the properties of isosceles triangles and congruent triangles).</p> <p>G.CO.12—Explain a construction of an angle bisector (for example, explain the justification behind each step of a compass construction of the angle bisector of a given angle by reasoning about the properties of congruent triangles).</p>	3
Probability	<p>MGSE9-12.S.CP.4 Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.</p> <p>MGSE9-12.S.CP.2 Understand that if two events A and B are independent, the probability of A and B occurring together is the product of their probabilities, and that if the probability of two events A and B occurring together is the product of their probabilities, the two events are independent.</p> <p>MGSE9-12.S.CP.1 Describe categories of events as subsets of a sample space using unions, intersections, or complements of other events (or, and, not).</p>	10

MGSE9-12.S.CP.5 Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.

MGSE9-12.S.CP.3 Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$. Interpret independence of A and B in terms of conditional probability; that is, the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.

MGSE9-12.S.CP.7 Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answers in context.

MGSE9-12.S.CP.6 Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in context.

Algebra II

Proficiency Scale	Standard	# of Days
Complex Numbers	<p>MGSE9-12.N.CN.1 Understand there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ where a and b are real numbers. (1 day)</p> <p>MGSE9-12.N.CN.2 Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. (1 day)</p> <p>MGSE9-12.N.CN.3 Find the conjugate of a complex number; use the conjugate to find the quotient of complex numbers. (2 days)</p> <p>MGSE9-12.N.CN.8 Extend polynomial identities to include factoring with complex numbers. For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$. (1 day)</p>	5
Quadratic Equations and Functions	<p>MGSE9-12.A.REI.2 Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. (1 day)</p> <p>MGSE9-12.A.REI.4 Solve quadratic equations in one variable. (1 day)</p> <p>MGSE9-12.A.REI.4b Solve quadratic equations by inspection (e.g., for $x^2 - 49$), taking square roots, factoring, completing the square, and the quadratic formula, as appropriate to the initial form of the equation (limit to real number solutions). (4 days)</p> <p>MGSE9-12.N.CN.7 Solve quadratic equations with real coefficients that have complex solutions by (but not limited to) square roots, completing the square, and the quadratic formula. (4 days)</p>	10
Rational Exponents and Radicals	<p>MGSE9-12.N.RN.1. Explain how the meaning of rational exponents follows from extending the properties of integer exponents to rational numbers, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $[5^{1/3}]^3 = 5[(1/3) \times 3]$ to hold, so $[5^{1/3}]^3$ must equal 5. (2 days)</p> <p>MGSE9-12.N.RN.2 Rewrite expressions involving radicals and rational exponents using the properties of exponents. (2days)</p> <p>MGSE9-12.A.SSE.3 Choose and produce an equivalent form of an expression to real and explain properties of the quantity represented by the expression. (3 days)</p> <p>MGSE9-12.A.SSE.3c Use the properties of exponents to transform expressions for exponential functions. For example, the expression 1.15^t, where t is in years, can be rewritten as $[1.15^{1/12}]^{12t} \approx$</p>	10

	1.012(12t) to reveal the approximate equivalent monthly interest rate if the annual rate is 15%. (3 days)	
Evaluating Polynomials	<p>MGSE9-12.A.APR.3 Identify zeros of polynomials when suitable factorizations are available and use the zeros to construct a rough graph of the function defined by the polynomial. (2 days)</p> <p>MGSE9-12.A.APR.4 Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples. (2 days)</p> <p>MGSE9-12.A.APR.5 Know and apply that the Binomial Theorem gives the expansion of $(x + y)^n$ in powers of x and y for a positive integer n, where x and y are any numbers, with coefficients determined using Pascal's Triangle. (3 days)</p> <p>MGSE9-12.N.CN.9 Use the Fundamental Theorem of Algebra to find all roots of a polynomial equation. (1 day)</p> <p>MGSE9-12.A.SSE.2 Use the structure of an expression to rewrite it in different equivalent forms. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$. (2 days)</p>	10
Inverse Functions	<p>MGSE9-12.F.BF.4 Find inverse functions. (3 days)</p> <p>MGSE9-12.F.BF.4a Solve an equation of the form $f(x) = c$ for a simple function f that has an inverse and write an expression for the inverse. For example, $f(x) = 2(x^3)$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$. (3 days)</p> <p>MSG9-12.F.BF.4b Verify by composition that one function is the inverse of another. (2 days)</p> <p>MGSE9-12.F.BF.4c Read values of an inverse function from a graph or a table, given that the function has an inverse. (2 days)</p>	10
Generating Functions	<p>MGSE9-12.F.BF.1 Write a function that describes a relationship between two quantities. (1 day)</p> <p>MGSE9-12.F.BF.1a Determine an explicit expression and the recursive process (steps for calculation) from context. For example, if Jimmy starts out with \$15 and earns \$2 a day, the explicit expression "$2x+15$" can be described recursively (either in writing or verbally) as "to find out how much money Jimmy will have tomorrow, you add \$2 to his total today." (2 days)</p> <p>MGSE9-12.A.CED.2 Create linear, quadratic, and exponential equations in two or more variables to represent relationships</p>	5

	between quantities; graph equations on coordinate axes with labels and scales. (The phrase “in two or more variables” refers to formulas like the compound interest formula, in which $A = P(1 + r/n)^{nt}$ has multiple variables.) (2 days)	
Combining Functions	<p>MGSE9-12.F.BF.1 Write a function that describes a relationship between two quantities. (1 day)</p> <p>MGSE9-12.F.BF.1b Combine standard function types using arithmetic operations in contextual situations (Adding, subtracting, and multiplying functions of different types). (1 day)</p> <p>MGSE9-12.F.BF.1c Compose functions. For example, if $T(y)$ is the temperature in the atmosphere as a function of height, and $h(t)$ is the height of a weather balloon as a function of time, then $T(h(t))$ is the temperature at the location of the weather balloon as a function of time. (2 days)</p> <p>MGSE9-12.F.IF.7 Graph functions expressed algebraically and show key features of the graph both by hand and by using technology. (1 day)</p>	5
Data Comparisons	<p>MGSE9-12.S.ID.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, mean absolute deviation, standard deviation) of two or more different data sets. (1 day)</p> <p>MGSE9-12.S.ID.4 Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. (2 days)</p> <p>MGSE9-12.S.IC.1 Understand statistics as a process for making inferences about population parameters based on a random sample from that population. (1 day)</p> <p>MGSE9-12.S.IC.2 Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For example, a model says a spinning coin falls heads up with probability 0.5. Would a result of 5 tails in a row cause you to question the model? (2 days)</p> <p>MGSE9-12.S.IC.3 Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each. (1 day)</p> <p>MGSE9-12.S.IC.4 Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling. (1 day)</p>	10

MGSE9-12.S.IC.5 Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant. (1 day)

MGSE9-12.S.IC.6 Evaluate reports based on data. For example, determining quantitative or categorical data; collection methods; biases or flaws in data. (1 day)

Pre-Calculus

Unit 1 Conics

Standard	Learning Target
MGSE9-12.G.GPE.2 Derive the equation of a parabola given a focus and directrix.	I can write the equation of a parabola given the vertex and focus. I can write the equation of a parabola given the focus and directrix.
MGSE9-12.G.GPE.3 Derive the equations of ellipses and hyperbolas given the foci, using the fact that the sum or difference of distances from the foci is constant.	I can write the equation of an ellipse. I can write the equation of a hyperbola.
MGSE9-12.A.REI.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. For example, find the points of intersection between the line $y = -3x$ and the circle $x^2 + y^2 = 3$.	I can find the intersection of a line and a circle. I can check if the line is a tangent to the given circle.

Unit 2: Introduction to Trigonometric Functions

Standard	Learning Target
MGSE9-12.F.IF.4 Using tables, graphs, and verbal descriptions, interpret the key characteristics of a function which models the relationship between two quantities. Sketch a graph showing key features including: intercepts; interval where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.	I can interpret the key features of various functions from their graph such as intercepts, interval of increasing/decreasing, relative max/min.
MGSE9-12.F.IF.7 Graph functions expressed algebraically and show key features of the graph both by hand and by using technology. MGSE9-12.F.IF.7e Graph trigonometric functions, showing period, midline, and amplitude.	I can graph trigonometric functions, showing period, midline, and amplitude.
MGSE9-12.F.TF.2 Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.	I can draw unit circle and interpret radian measures of angles traversed counterclockwise around the unit circle.
MGSE9-12.F.TF.5 Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	I can choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.

MGSE9-12.F.TF.8 Prove the Pythagorean identity $(\sin A)^2 + (\cos A)^2 = 1$ and use it to find $\sin A$, $\cos A$, or $\tan A$, given $\sin A$, $\cos A$, or $\tan A$, and the quadrant of the angle.	I can prove the Pythagorean identity $(\sin A)^2 + (\cos A)^2 = 1$ and use it to find $\sin A$, $\cos A$, or $\tan A$, given $\sin A$, $\cos A$, or $\tan A$, and the quadrant of the angle.
--	--

Unit 3: Trigonometric Functions.

Standard	Learning Target
MGSE9-12.F.BF.4 Find inverse functions.	I can find the inverse of a function if it exists.
MGSE9-12.F.BF.4d Produce an invertible function from a non-invertible function by restricting the domain.	I can find the inverse of a function from a non-invertible function by restricting the domain.
MGSE9-12.F.TF.3 Use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x , where x is any real number.	I can use special triangles to determine geometrically the values of sine, cosine, tangent for $\pi/3$, $\pi/4$ and $\pi/6$, and use the unit circle to express the values of sine, cosine, and tangent for $\pi - x$, $\pi + x$, and $2\pi - x$ in terms of their values for x , where x is any real number.
MGSE9-12.F.TF.4 Use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.	I can use the unit circle to explain symmetry (odd and even) and periodicity of trigonometric functions.
MGSE9-12.F.TF.6 Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed.	I understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed.
MGSE9-12.F.TF.7 Use inverse functions to solve trigonometric equations that arise in modeling contexts; evaluate the solutions using technology, and interpret them in terms of the context	I can use inverse functions to solve trigonometric equations and interpret them in terms of the context.

Unit 4: Trigonometry of General Triangles.

Standard	Learning Target
MGSE9-12.G.SRT.9 Derive the formula $A = (1/2)ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.	I can derive the formula $A = (1/2)ab \sin(C)$ for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.
MGSE9-12.G.SRT.10 Prove the Laws of Sines and Cosines and use them to solve problems.	I can prove the Laws of Sines and Cosines and use them to solve problems.
MGSE9-12.G.SRT.11 Understand and apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles (e.g., surveying problems, resultant forces).	I can apply the Law of Sines and the Law of Cosines to find unknown measurements in right and non-right triangles

Unit 5: Trigonometric Identities.

Standard	Learning Target
MGSE9-12.F.TF.9 Prove addition, subtraction, double, and half-angle formulas for sine, cosine, and tangent and use them to solve problems.	I can prove addition, subtraction, double, and half-angle formulas for sine, cosine, and tangent and use them to solve problems.

Unit 6: Matrices.

Standard	Learning Target
MGSE9-12.N.VM.6 Use matrices to represent and manipulate data, e.g., transformations of vectors.	I can use matrices to represent and manipulate data, e.g., transformations of vectors.
MGSE9-12.N.VM.7 Multiply matrices by scalars to produce new matrices.	I can multiply matrices by scalars to produce new matrices.
MGSE9-12.N.VM.8 Add, subtract, and multiply matrices of appropriate dimensions.	I can add, subtract, and multiply matrices of appropriate dimensions.
MGSE9-12.N.VM.9 Understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.	I can understand that, unlike multiplication of numbers, matrix multiplication for square matrices is not a commutative operation, but still satisfies the associative and distributive properties.
MGSE9-12.N.VM.10 Understand that the zero and identity matrices play a role in matrix addition and multiplication similar to the role of 0 and 1 in the real numbers. The determinant of a square matrix is nonzero if and only if the matrix has a multiplicative inverse.	I can find the inverse of a 2 x 2 and 3 x 3 matrix by hand and using technology I can find the inverse of higher order matrices.
MGSE9-12.N.VM.12 Work with 2 X 2 matrices as transformations of the plane, and interpret the absolute value of the determinant in terms of area.	I can find the area of a triangle formed by the given points using the absolute value of the determinant.
MGSE9-12.A.REI.8 Represent a system of linear equations as a single matrix equation in a vector variable.	I can represent a system of linear equations as a single matrix equation in a vector variable.
MGSE9-12.A.REI.9 Find the inverse of a matrix if it exists and use it to solve systems of linear equations (using technology for matrices of dimension 3×3 or greater).	I can find the inverse of a matrix if it exists and use it to solve systems of linear equations

Unit 7: Vectors.

Standard	Learning Target
MGSE9-12.N.CN.3 Find the conjugate of a complex number; use the conjugate to find the absolute value (modulus) and quotient of complex numbers.	I can find the conjugate of a complex number; use the conjugate to find the absolute value (modulus) and quotient of complex numbers

MGSE9-12.N.CN.4 Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number represent the same number.	I can represent complex numbers on the complex plane in rectangular and polar form
MGSE9-12.N.CN.5 Represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation.	I can represent addition, subtraction, multiplication, and conjugation of complex numbers geometrically on the complex plane; use properties of this representation for computation.
MGSE9-12.N.CN.6 Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints.	I can calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints.
MGSE9-12.N.VM.1 Recognize vector quantities as having both magnitude and direction. Represent vector quantities by directed line segments, and use appropriate symbols for vectors and their magnitudes (e.g., v , $ v $, $ v $, \vec{v}).	I can recognize vector quantities as having both magnitude and direction.
MGSE9-12.N.VM.2 Find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point.	I can find the components of a vector by subtracting the coordinates of an initial point from the coordinates of a terminal point.
MGSE9-12.N.VM.3 Solve problems involving velocity and other quantities that can be represented by vectors.	I can solve problems involving velocity and other quantities that can be represented by vectors.
MGSE9-12.N.VM.4 Add and subtract vectors.	I can add and subtract vectors.
MGSE9-12.N.VM.4a Add vectors end-to-end, component-wise, and by the parallelogram rule. Understand that the magnitude of a sum of two vectors is typically not the sum of the magnitudes.	I can add vectors end-to-end, component-wise, and by the parallelogram rule.
MGSE9-12.N.VM.4b Given two vectors in magnitude and direction form, determine the magnitude and direction of their sum.	I can determine the magnitude and direction of the sum, given two vectors in magnitude and direction form
MGSE9-12.N.VM.4c Understand vector subtraction $v - w$ as $v + (-w)$, where $(-w)$ is the additive inverse of w , with the same magnitude as w and v pointing in the opposite direction. Represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise.	I can represent vector subtraction graphically by connecting the tips in the appropriate order, and perform vector subtraction component-wise
MGSE9-12.N.VM.5 Multiply a vector by a scalar.	I can multiply a vector by a scalar.
MGSE9-12.N.VM.5a Represent scalar multiplication graphically by scaling vectors and possibly reversing their direction; perform scalar multiplication component-wise, e.g., as $c(v_x, v_y) = (c \cdot v_x, c \cdot v_y)$.	I can represent scalar multiplication graphically by scaling vectors and possibly reversing their direction.
MGSE9-12.N.VM.5b Compute the magnitude of a scalar multiple cv using $ cv = c v $. Compute the direction of cv knowing that when $ c v \neq 0$, the direction of cv is either along v (for $c > 0$) or against v (for $c < 0$).	I can compute the magnitude of a scalar multiple cv using $ cv = c v $.
MGSE9-12.N.VM.11 Multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions	I can multiply a vector (regarded as a matrix with one column) by a matrix of suitable dimensions to produce another vector.

to produce another vector. Work with matrices as transformations of vectors.	
--	--

Unit 8: Probability.

Standard	Learning Target
MGSE9-12.CP.8 Apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B)=[P(A)] \times [P(B A)] = [P(B)] \times [P(A B)]$, and interpret the answer in terms of the model.	I can apply the general Multiplication Rule in a uniform probability model, $P(A \text{ and } B)=[P(A)] \times [P(B A)] = [P(B)] \times [P(A B)]$, and interpret the answer in terms of the model.
MGSE9-12.S.CP.9 Use permutations and combinations to compute probabilities of compound events and solve problems.	I can use permutations and combinations to compute probabilities of compound events and solve problems.
MGSE9-12.S.MD.1 Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.	I can define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.
MGSE9-12.S.MD.2 Calculate the expected value of a random variable; interpret it as the mean of a probability distribution.	I can calculate the expected value of a random variable; interpret it as the mean of a probability distribution.
MGSE9-12.S.MD.3 Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value	I can develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value
MGSE9-12.S.MD.4 Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value	I can develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value
MGSE9-12.S.MD.5 Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.	I can weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.
MGSE9-12.S.MD.5a Find the expected payoff for a game of chance	I can find the expected payoff for a game of chance
MGSE9-12.S.MD.5b Evaluate and compare strategies on the basis of expected values	I can evaluate and compare strategies on the basis of expected values
MGSE9-12.S.MD.6 Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).	I can use probabilities to make fair decisions
MGSE9-12.S.MD.7 Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).	I can analyze decisions and strategies using probability concepts.

Advanced Mathematical Decision Making

Proficiency Scale	Standard	# of Days
Decision Making in Finance	<p>MAMDM.A.3 Students will create and analyze mathematical models to make decisions related to earning, investing, spending, and borrowing money.</p> <p>a. Use exponential functions to model change in a variety of financial situations.</p> <p>b. Determine, represent, and analyze mathematical models for income, expenditures, and various types of loans and investments</p>	12
Investing	<p>MAMDM.A.3 Students will create and analyze mathematical models to make decisions related to earning, investing, spending, and borrowing money.</p> <p>a. Use exponential functions to model change in a variety of financial situations.</p> <p>b. Determine, represent, and analyze mathematical models for income, expenditures, and various types of loans and investments</p>	10
Credit Cards	<p>MAMDM.A.3 Students will create and analyze mathematical models to make decisions related to earning, investing, spending, and borrowing money.</p> <p>a. Use exponential functions to model change in a variety of financial situations.</p> <p>b. Determine, represent, and analyze mathematical models for income, expenditures, and various types of loans and investments</p>	10
Filing Income Taxes	<p>MAMDM.A.3 Students will create and analyze mathematical models to make decisions related to earning, investing, spending, and borrowing money.</p> <p>a. Use exponential functions to model change in a variety of financial situations.</p> <p>b. Determine, represent, and analyze mathematical models for income, expenditures, and various types of loans and investments</p>	15
Numbers Sense	<p>MAMDM.N.1 Students will extend the understanding of proportional reasoning, ratios, rates, and percents by applying them to various settings to include business, media, and consumerism.</p> <p>a. Use proportional reasoning to solve problems involving ratios.</p> <p>c. Solve problems involving large quantities that are not easily measured.</p>	13

Using Models to Determine Probabilities	<p>MAMDM.D.1 Students will determine probability and expected value to inform everyday decision making.</p> <p>a. Determine conditional probabilities and probabilities of compound events to make decisions in problem situations.</p> <p>b. Use probabilities to make and justify decisions about risks in everyday life.</p>	15
Statistics	<p>MAMDM.D.2. Students will build the skills and vocabulary necessary to analyze and critique reported statistical information, summaries, and graphical displays.</p> <p>MAMDM.D.3 Students will apply statistical methods to design, conduct, and analyze statistical studies.</p> <p>Learning Targets:</p> <p>1) I can understand statistical definitions</p> <p>2) I can understand the different types of surveys</p>	15

AP Calculus

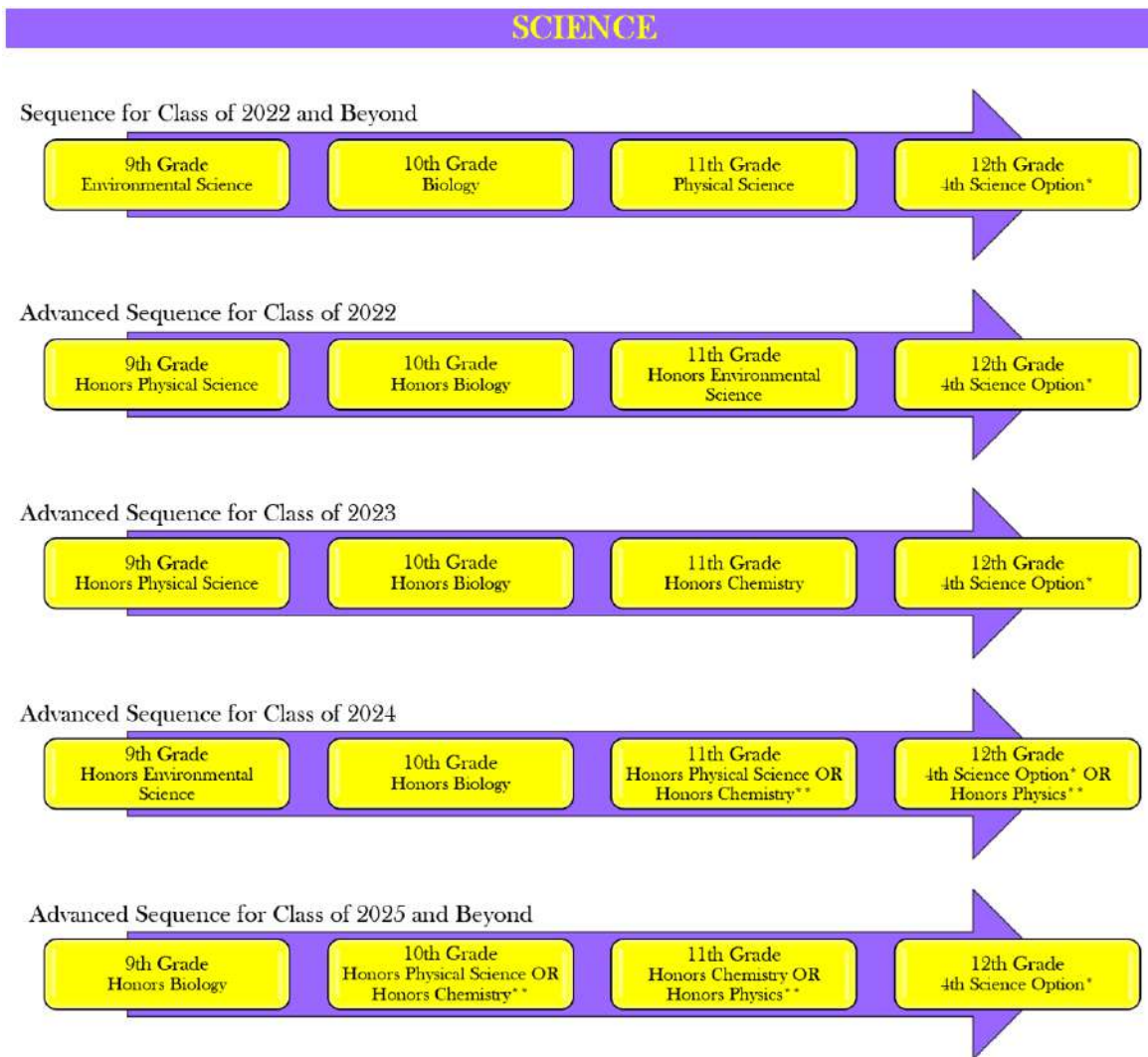
More information coming soon

Science

From the Georgia Department of Education (GaDOE; n.d.b):

The Georgia Science standards are designed to provide foundational knowledge and skills for all students to develop proficiency in science. The Project 2061’s Benchmarks for Science Literacy and the follow up work, A Framework for K-12 Science Education were used as the core of the standards to determine appropriate content and process skills for students. The standards focus on a limited number of core disciplinary ideas and crosscutting concepts which build from kindergarten to high school.

The Science Georgia Standards of Excellence drive instruction. Hands-on, student-centered, and inquiry-based approaches should be the emphasis of instruction. The standards are a required minimum set of expectations that show proficiency in science.



Environmental Science

More information coming soon

Skeleton

Intro to Environmental Science

- Few days - 1 week

Ecology

- 8 - 9 weeks

Populations

- 3 - 4 weeks

Natural Resources

- 3 - 4 weeks

The highlighted environmental science standards below will be heavily emphasized as they support foundational biology knowledge:

Environmental Science

SEV1. Obtain, evaluate, and communicate information to investigate the flow of energy and cycling of matter within an ecosystem.

- d. **Develop and use a model** to compare and analyze the levels of biological organization including organisms, populations, communities, ecosystems, and biosphere.
**Symbiotic relationships? Biology uses these terms frequently.
- e. **Develop and use a model** based on the Laws of Thermodynamics to predict energy transfers throughout an ecosystem (food chains, food webs, and trophic levels).
(Clarification statement: The first and second law of thermodynamics should be used to support the model.)
** Arrange components of a food web in different terrestrial and aquatic ecosystems
** Compare the quantity of energy in the steps of an energy pyramid (10% Rule)
** Explain in terms of photosynthesis (producers) and cellular respiration (consumers)
- f. **Analyze and interpret data** to construct an argument of the necessity of biogeochemical cycles (hydrologic, nitrogen, phosphorus, oxygen, and carbon) to support a sustainable ecosystem.
** Nitrogen = focus on bacteria's importance
** Oxygen, carbon, and water = relate to photosynthesis and cellular respiration
- d. **Evaluate claims, evidence, and reasoning** of the relationship between the physical factors (e.g., insolation, proximity to coastline, topography) and organismal adaptations within terrestrial biomes.
** It would be helpful to briefly mention natural selection regarding different adaptations
** Factors that affect biodiversity (resource availability)
** Ability to survive based on stability of conditions
- g. **Plan and carry out an investigation** of how chemical and physical properties impact aquatic biomes in Georgia.
(Clarification statement: Consider the diverse aquatic ecosystems across the state such as

streams, ponds, coastline, estuaries, and lakes.)

**** Could be tied to “Predict an organism’s ability to survive within changing limits like temperature and pH”**

SEV2. Obtain, evaluate, and communicate information to construct explanations of stability and change in Earth’s ecosystems.

- h. **Analyze and interpret data** related to short-term and long-term natural cyclic fluctuations associated with climate change.
(Clarification statement: Short-term examples include but are not limited to El Niño and volcanism. Long-term examples include but are not limited to variations in Earth’s orbit such as Milankovitch cycles.)
**** Biology does not focus on specific cycles**
- i. **Analyze and interpret data** to determine how changes in atmospheric chemistry (carbon dioxide and methane) impact the greenhouse effect.
**** Human activities like natural resources consumption and greenhouse gas production**
- j. **Construct an argument** to predict changes in biomass, biodiversity, and complexity within ecosystems, in terms of ecological succession.
**** As it progresses, biodiversity changes**
- k. **Construct an argument** to support a claim about the value of biodiversity in ecosystem resilience including keystone, invasive, native, endemic, indicator, and endangered species.
**** Focus on keystone stone and differentiate between non-native and invasive species**

SEV3. Obtain, evaluate, and communicate information to evaluate types, availability, allocation, and sustainability of energy resources.

- l. **Analyze and interpret data** to communicate information on the origin and consumption of renewable forms of energy (wind, solar, geothermal, biofuel, and tidal) and non-renewable energy sources (fossil fuels and nuclear energy).
**** Biology does not focus on origin or differentiation between the two types**
- m. **Construct an argument** based on data about the risks and benefits of renewable and nonrenewable energy sources.
(Clarification statement: This may include, but is not limited to, the environmental, social, and economic risks and benefits.)
**** Environmental impact from human use**
- n. **Obtain, evaluate, and communicate data** to predict the sustainability potential of renewable and non-renewable energy resources.
**** Biology does not focus on sustainability**
- o. **Design and defend** a sustainable energy plan based on scientific principles for your location.
**** Biology does not focus on sustainable energy plans**

SEV4. Obtain, evaluate, and communicate information to analyze human impact on natural resources.

- p. **Construct and revise a claim based on evidence** on the effects of human activities on natural resources.

Human Activities Natural Resources

Agriculture Land
Forestry Water
Ranching Air
Mining Organisms
Urbanization
Fishing
Water use
Pollution

Desalination

Waste water treatment

- q. **Design, evaluate, and refine solutions** to reduce human impact on the environment including, but not limited to, smog, ozone depletion, urbanization, and ocean acidification.
** It would be beneficial to relate this to different biomes and impact on biodiversity.
** Biology is required to do the same but focuses on chemical use, natural resources consumption, introduction of non-native species, and greenhouse gas production.
- r. **Construct an argument** to evaluate how human population growth affects food demand and food supply (GMOs, monocultures, desertification, Green Revolution).
** Tied to human impact concepts above. Make sure to emphasize carrying capacity.

SEV5. Obtain, evaluate, and communicate information about the effects of human population growth on global ecosystems.

- s. **Construct explanations** about the relationship between the quality of life and human impact on the environment in terms of population growth, education, and gross national product.
** Biology focuses on environmental relationships and stability of ecosystems
- t. **Analyze and interpret data** on global patterns of population growth (fertility and mortality rates) and demographic transitions in developing and developed countries.
** Relate to carrying capacity and limiting factors
- u. **Construct an argument from evidence** regarding the ecological effects of human innovations (Agricultural, Industrial, Medical, and Technological Revolutions) on global ecosystems.
** Relate to carrying capacity and limiting factors
- v. **Design and defend** a sustainability plan to reduce your individual contribution to environmental impacts, taking into account how market forces and societal demands (including political, legal, social, and economic) influence personal choices.
** Extension activity that reinforces environmental impacts

Biology
More information coming soon

Skeleton

Ecology

- 4 weeks

Evolution

- 2 weeks

Taxonomy

- 1 - 2 weeks

Cells and Genetics

- (Will include biological molecules unit)
- 5 weeks

Review

- 2 weeks

Expect Milestone EOC three weeks before the end of the semester.

After EOC

- Biological molecules (biochemistry)

Physical Science

		Pacing Guide	For Physical Science			
Review -prerequisite for Unit 1	Q-1	Q-1/2	Q-2	Q-3	Q-3/4	Q-4
Unit 1	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Scientific method and measurement Conversion; metric system Lab safety;	Make sense of the Physical World: Atomic Structure and the Periodic Table Properties and Reactions	Energy and Matter: Radioactivity	Classification of matter	Energy, Force and Motion; Forces in the Physical World	Electricity and Magnetism	Waves: Electromagnetic Spectrum, light and Sound
	SPS1.a, b, c SPS2. a, b, c SPS3. a, b, c	SPS4. a, b, c	SPS5. a, b SPS6. a, b, c, d, e SPS7. a, b, c, d	SPS8. a, b, c, d	SPS10. a, b, c	SPS9. a, b, c, d, e
Big ideas: Use scientific method to solve problems	Big Ideas: Atomic Structure	Big Ideas: Chemical bonding	Big Ideas: States of Matter	Big Ideas: Newton's Laws	Big Ideas:	Big Ideas: Waves transfer energy

Convert between metric units	Determine trends such as:	Radioactive	Gas Laws	$F=ma$	Conduction, induction and friction	Electromagnetic vs. mechanical waves
Use lab safety when conducting labs	Valence electrons	Emissions	Properties of Solutions	Effects of Equal/unequal forces Weight and gravity	Series and parallel	Reflection, refraction, interference, diffraction
Correctly use lab equipment	Types of ion	Reactivity	Classification of matter	Work, power, mechanical advantage (computations)	Circuits	Speed of waves and mediums
	Isotopes	Fission and fusion	Energy flow in a system	Speed vs acceleration	Relationship between current, voltage, and resistance	Doppler effect
	Type of element	Half-life	pH		Relationship between electricity and magnetism	
	Phase at room temperature					
	Chemical bonding					
Assessments:	Assessments:	Assessments:	Assessments:	Assessments:	Assessments:	Assessments:
Lab safety rules	Reading the periodic table (F)	Nuclear equations (F)	Solutions	Problems as defined on milestone formula sheet (F) constructing and using graphs (F) interpret speed and acceleration graphs (F)	Labs:	label transverse and compression waves (F)
Identify lab equipment	Properties of the periodic table (F)	Half - life lab (F)	Describing/ interpreting a solubility graph (F)		Electroscope (F)	calculating interference (F)
Metric Conversions	Labs (F): hydrogen and the metals	Unit test (s)	Thermal energy problems (F)		Building circuits (F)	create and label a poster of EMS (F)
	Criss-cross formulas		Phase change activity		Electromagnets (F)	
			Popping corn		Quizzes (F):	

	<p>Naming ionic and covalent compounds</p> <p>Naming reaction</p> <p>Balancing equations</p> <p>Labs (F):</p> <p>Alka seltzer (conservation of mass and chemical reactions)</p> <p>Quizzes (F)</p> <p>Unit test (s)</p>		<p>Specific heat</p> <p>pH lab/scale</p> <p>Energy transformations</p> <p>Quizzes (F)</p> <p>Unit test (s)</p>	<p>Interpret free body diagrams (F)</p> <p>Labs (F): squaring off with velocity</p> <p>Pendulum</p> <p>Acceleration due to gravity</p> <p>Power</p> <p>Quizzes: Data and the scientific method</p> <p>Graphing</p> <p>Newton's Laws</p> <p>Describing motion</p> <p>Unit test (s)</p>	<p>Electricity</p> <p>Unit test (s)</p>	<p>label and measure (F)</p> <p>Quizzes (F):</p> <p>Waves</p> <p>Light and sound</p> <p>Unit test (s)</p>
--	---	--	--	---	---	---

Chemistry

More information coming soon

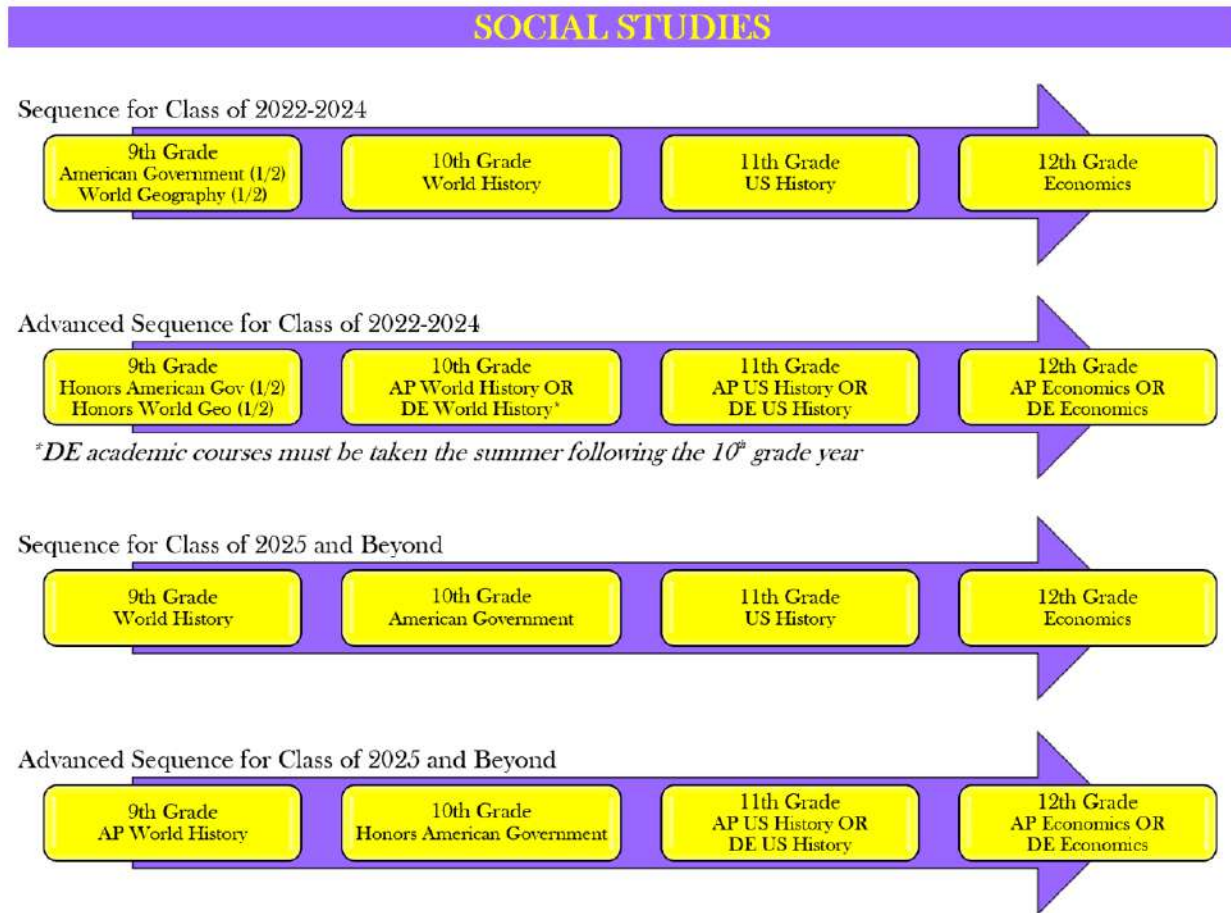
Zoology

More information coming soon

Social Studies

From the Georgia Department of Education (GaDOE; n.d.c):

The Social Studies Frameworks provide one way that teachers, schools, and districts might organize and teach the Georgia Standards of Excellence (GSE) within units. Units and frameworks align to connecting themes and enduring understandings that transcend units and courses. Ultimately, the enduring understandings are what students will take from a course that applies to life beyond school. All units and frameworks are designed to promote inquiry.



World History

Unit	Standards	Days of Instruction
River Valley	SSWH1, SSWH2	6 days <ul style="list-style-type: none"> • 5 instructional days • 1 test day
Greece	SSWH3	4 days <ul style="list-style-type: none"> • 3 instructional days • 1 test day
Rome	SSWH3	9 days <ul style="list-style-type: none"> • 8 instructional days • 1 test day
Islam	SSWH5	5 days <ul style="list-style-type: none"> • 4 instructional days • 1 test day
Renaissance and Reformation	SSWH9	6 days <ul style="list-style-type: none"> • 5 instructional days • 1 test day
Age of Exploration and Scientific Revolution	SSWH10, SSWH13, SSWH14	8 days <ul style="list-style-type: none"> • 7 instructional days • 1 test day
		Total instructional days: 38
END OF FIRST QUARTER		
Enlightenment and American Revolution	SSWH13, SSWH14	6 days <ul style="list-style-type: none"> • 5 instructional days • 1 test day

World War I and Interwar Period	SSWH16a, SSWH17, SSWH18	8 days <ul style="list-style-type: none"> • 7 instructional days • 1 test day
World War II	SSWH19	8 days <ul style="list-style-type: none"> • 7 instructional days • 1 test day
Cold War	SSWH20, SSWH21b	7 days <ul style="list-style-type: none"> • 6 instructional days • 1 test day
Contemporary World	SSWH22	7 days <ul style="list-style-type: none"> • 6 instructional days • 1 test day
		Total instructional days: 36
Final Review	All standards	Remaining Days

American Government/Civics

Learning Targets

List the learning targets for each standard. Be sure to match the rigor of the standard.

American Government/Civics			
Unit 1 Forms and Foundations of Government			
Learning Target	Standard	Element	Pacing
<p>1. <i>Explain the characteristics of the different forms of government.</i></p> <p>2. <i>Explain the ideologies of the Enlightenment and the impact on modern government.</i></p> <p>3. <i>Explain the significance of the Magna Carta, Petition of Right and the English Bill of Rights.</i></p> <p>4. <i>Analyze the Declaration of Independence and find the philosophies of Hobbes, Locke, Rousseau, and Montesquieu in this document.</i></p>	<p>SSCG1 Compare and contrast various systems of government.</p> <p>SSCG2 Demonstrate knowledge of the political philosophies that shaped the development of United States constitutional government.</p>	<p>SSCG1</p> <p>a. Determine how governments differ in geographic distribution of power, particularly unitary, confederal, and federal types of government.</p> <p>b. Determine how some forms of government differ in their level of citizen participation particularly authoritarian (autocracy and oligarchy) and democratic.</p> <p>c. Determine how the role of the executive differs in presidential and parliamentary systems of governments.</p> <p>d. Differentiate between a direct democracy, representative democracy, and/or a republic.</p> <p>SSCG2</p> <p>a. Analyze key ideas of limited government and the rule of law as seen in the Magna Carta, the Petition of Right, and the English Bill of Rights.</p> <p>b. Analyze the impact of the writings of Hobbes (Leviathan), Locke (Second Treatise on Government), Rousseau (The Social Contract), and Montesquieu (The Spirit of the Laws) on our concept of government.</p> <p>c. Analyze the ways in which the philosophies listed in element 2b</p>	<p>7 DAYS</p> <p>4 days instruction</p> <p>1 day review</p> <p>1 day test</p> <p>1 day reteach</p>

		influenced the Declaration of Independence.	
--	--	---	--

Unit 2 The Constitution

<ol style="list-style-type: none"> 1. <i>Discuss the weaknesses in the Articles of Confederation.</i> 2. <i>Demonstrate knowledge of the framing and structure of the United States Constitution.</i> 3. <i>Analyze the debates during the drafting of the Constitution.</i> 	<p>SSCG3 Demonstrate knowledge of the framing and structure of the United States Constitution.</p>	<p>SSCG3</p> <ol style="list-style-type: none"> a. Analyze debates during the drafting of the Constitution, including the Three-Fifths Compromise, the Great Compromise, and the Commerce Clause. b. Analyze how the Constitution addresses the weaknesses of the Articles of Confederation. c. Explain the fundamental principles of the United States Constitution, including limited government, the rule of law, federalism, separation of powers, checks and balances, and popular sovereignty. d. Explain the key ideas in the debate over ratification made by the 	<p>6 DAYS</p> <p>3 days instruction</p> <p>1 day review</p> <p>1 day test</p> <p>1 day reteach</p>
---	---	--	---

		Federalists and the Anti-Federalists.	
--	--	---------------------------------------	--

American Government/Civics

Unit 2 The Constitution cont.

Learning Target	Standard	Element	Pacing
1. <i>Discuss the weaknesses in the Articles of Confederation.</i> 2. <i>Demonstrate knowledge of the framing and structure of the United States Constitution.</i> 3. <i>Analyze the debates during the drafting of the Constitution.</i>	<p>SSCG4 Demonstrate knowledge of the organization and powers of the national government.</p> <p>SSCG5 Demonstrate knowledge of the federal system of government described in the United States Constitution.</p>	<p>SSCG4 Demonstrate knowledge of the organization and powers of the national government.</p> <p>a. Describe the structure, powers, and limitations of the legislative, executive, and judicial branches, as described in the Constitution.</p> <p>b. Analyze the relationship between the three branches in a system of checks and balances and separation of powers.</p> <p>SSCG5 Demonstrate knowledge of the federal system of government described in the United States Constitution.</p> <p>a. Explain and analyze the relationship of state governments to the national government.</p> <p>b. Define and provide examples of enumerated, implied, concurrent, reserved, and denied powers.</p> <p>c. Analyze the ongoing debate that focuses on the balance of power between state and national governments as it relates to current issues.</p> <p>d. Analyze the Supremacy Clause found in Article VI and the role of</p>	3 days

		<p>the U.S. Constitution as the “supreme law of the land.”</p> <p>e. Describe the roles of Congress and the states in the formal process of amending the Constitution.</p>	
--	--	--	--

Unit 3 The Civil Liberties v. Civil Rights

<p>1. <i>Demonstrate knowledge of civil liberties and civil rights.</i></p> <p>2. <i>Analyze civil rights as equal protections for all people (e.g., Civil Rights Act, Brown v. Board of Education, etc.)</i></p>	<p>SSCG6 Analyze the meaning and importance of each of the rights guaranteed under the Bill of Rights and how each is secured.</p> <p>SSCG7 Demonstrate knowledge of civil liberties and civil rights.</p>	<p>SSCG6 No Elements</p> <p>SSCG7 Demonstrate knowledge of civil liberties and civil rights.</p> <p>a. Define civil liberties as protections against government actions (e.g., First Amendment).</p> <p>b. Define civil rights as equal protections for all people [e.g., Civil Rights Act, Brown v. Board of Education, Reconstruction Amendments (13-15), etc.]</p> <p>c. Analyze due process of law as expressed in the 5th and 14th amendments, as understood through the process of incorporation.</p> <p>d. Identify how amendments extend the right to vote.</p>	<p>5 DAYS</p> <p>2 days instruction</p> <p>1 day review</p> <p>1 day test</p> <p>1 day reteach</p>
---	--	---	--

American Government/Civics

Unit 4 Legislative Branch

Learning Target	Standard	Element	Pacing
-----------------	----------	---------	--------

<ol style="list-style-type: none"> 1. <i>Explain the duties of the Legislative Branch</i> 2. <i>Compare and contrast the House of Representatives and Senate.</i> 3. <i>Explain the positive and negative aspects of lobbying.</i> 4. <i>Explain the impeachment and removal process.</i> 	<p>SSCG8 Demonstrate knowledge of the legislative branch of government.</p> <p>SSCG9 Explain the impeachment and removal process and its use for federal officials as defined in the U.S. Constitution. <i>(No elements)</i></p>	<p>SSCG8</p> <ol style="list-style-type: none"> a. Cite the formal qualifications for representatives and senators listed in the Constitution. b. Describe the election process for representatives and senators and how the 17th Amendment impacted the election of senators. c. Compare the terms of office for each chamber of Congress and explain the Founders’ intent. d. Compare and contrast the powers of each chamber of Congress (e.g., power of the purse, 16th Amendment, treaties, etc.) e. Explain the steps in the legislative process. f. Explain the functions of various leadership positions and committees within the legislature. g. Analyze the positive and negative role lobbyists play in the legislative process. 	<p>7 DAYS</p> <p>4 days instruction</p> <p>1 day review</p> <p>1 day test</p> <p>1 day reteach</p>
Unit 5 Executive Branch			
<ol style="list-style-type: none"> 1. <i>Demonstrate knowledge of the executive branch of government.</i> 2. <i>Analyze the role of the Electoral College.</i> 3. <i>Analyze the roles of the president. (the aspects of Foreign & Domestic policy)</i> 	<p>SSCG10 Demonstrate knowledge of the executive branch of government.</p> <p>SSCG11 Explain the functions of the departments and agencies of the federal bureaucracy.</p> <p>SSCG12 Describe the tools used to carry out United States foreign policy, including diplomacy and treaties; economic, military, and humanitarian aid; and sanctions and military intervention. <i>(No elements)</i></p>	<p>SSCG10</p> <ol style="list-style-type: none"> a. Cite the formal qualifications listed in the Constitution for President of the United States. b. Describe informal qualifications common to past presidents. c. Identify term of office and describe the line of succession (e.g., 20th, 22nd, and 25th amendments). d. Analyze the role of the Electoral College in electing the President and the clarification provided in the 12th Amendment. e. Distinguish between the roles of the President, including Commander 	<p>6 DAYS</p> <p>3 days instruction</p> <p>1 day review</p> <p>1 day test</p> <p>1 day reteach</p>

		<p>in Chief of the Armed Forces, chief executive, chief agenda setter, chief of state, chief diplomat, and party leader.</p> <p>SSCG11 Explain the functions of the departments and agencies of the federal bureaucracy.</p> <p>a. Compare/Contrast the organization & responsibilities of independent regulatory agencies, government corporations, and executive agencies.</p> <p>b. Explain the functions of the President's Cabinet.</p>	
American Government/Civics			
Unit 6 Judicial Branch			
Learning Target	Standard	Element	Pacing
<p>1. <i>Explain the jurisdiction and role of the Supreme Court.</i></p> <p>2. <i>Analyze the aspects of the case Marbury v. Madison and judicial review.</i></p> <p>3. <i>Compare judicial activism and judicial restraint.</i></p>	<p>SSCG13 Demonstrate knowledge of the operation of the judicial branch of government.</p>	<p>SSCG13</p> <p>a. Describe the selection and approval process for federal judges.</p> <p>b. Explain the jurisdiction of the Supreme Court, federal courts and the state courts.</p> <p>c. Examine how John Marshall established judicial review through his opinion in Marbury v. Madison and relate its impact.</p> <p>d. Describe how the Supreme Court selects and decides cases.</p> <p>e. Compare the philosophies of judicial activism and judicial restraint and provide relevant examples (e.g., marriage, 2nd Amendment, death penalty, etc.)</p>	<p>5 DAYS</p> <p>2 days instruction</p> <p>1 day review</p> <p>1 day test</p> <p>1 day reteach</p>

United States History

Covered in depth

Lightly covered

Completely removed or mentioned only

The high school United States history course provides students with a survey of major events and themes in United States history. The course begins with English settlement and concludes with significant developments in the early 21st Century.

SSUSH1 Compare and contrast the development of English settlement and colonization during the 17th Century.

- a. Investigate how mercantilism and trans-Atlantic trade led to the development of colonies.
- b. Explain the development of the Southern Colonies, including but not limited to reasons established, impact of location and place, relations with American Indians, and economic development.
- c. Explain the development of the New England Colonies, including but not limited to reasons established, impact of location and place, relations with American Indians, and economic development.
- d. Explain the development of the Mid-Atlantic Colonies, including but not limited to reasons established, impact of location and place, relations with American Indians, and economic development.

SSUSH2 Describe the early English colonial society and investigate the development of its governance.

- a. Describe European cultural diversity including the contributions of different ethnic and religious groups.
- b. Describe the Middle Passage, the growth of the African population and their contributions, including but not limited to architecture, agriculture, and foodways.
- c. Describe different methods of colonial self-governance in the period of Salutary Neglect
- d. Explain the role of the Great Awakening in creating unity in the colonies and challenging traditional authority.

SSUSH3 Analyze the causes of the American Revolution.

- a. Explain how the French and Indian War and the 1763 Treaty of Paris laid the groundwork for the American Revolution.
- b. Explain colonial response to the Proclamation of 1763, the Stamp Act, and the Intolerable Acts as seen in the Sons and Daughters of Liberty and the Committees of Correspondence.
- c. Explain the importance of Thomas Paine's *Common Sense* to the movement for independence.

SSUSH4 Analyze the ideological, military, social, and diplomatic aspects of the American Revolution.

- a. Investigate the intellectual sources, organization, and argument of the Declaration of Independence including the role of Thomas Jefferson and the Committee of Five.
- b. Explain the reason for and significance of the French alliance and other foreign assistance including the diplomacy of Benjamin Franklin and John Adams.
- c. Analyze George Washington as a military leader, including but not limited to the influence of Baron von Steuben, the Marquis de LaFayette, and the significance of Valley Forge in the creation of a professional military.
- d. Investigate the role of geography at the Battles of Trenton, Saratoga, and Yorktown.
- e. Examine the roles of women, American Indians, and enslaved and free Blacks in supporting the war effort.
- f. Explain the significance of the Treaty of Paris, 1783.

SSUSH5 Investigate specific events and key ideas that brought about the adoption and implementation of the United States Constitution.

- a. Examine the strengths of the Articles of Confederation, including but not limited to the Land Ordinance of 1785, Northwest Ordinance of 1787 and their influence on westward migration, slavery, public education, and the addition of new states.
- b. Evaluate how weaknesses in the Articles of Confederation and Daniel Shays' Rebellion led to a call for a stronger central government.
- c. Explain the key features of the Constitution, including the Great Compromise, limited government, and the Three-Fifths Compromise.
- d. Evaluate the major arguments of the Anti-Federalists and Federalists during the debate on ratification of the Constitution, *The Federalist Papers*, and the roles of Alexander Hamilton and James Madison.
- e. Explain how objections to the ratification of the Constitution were addressed in the Bill of Rights.

SSUSH6 Analyze the challenges faced by the first five presidents and how they responded.

- a. Examine the presidency of Washington, including the precedents he set.
- b. Explain the presidency of John Adams including the Sedition Act and its influence on the election of 1800.
- c. Explore Jefferson's expansion of presidential power including the purchase and exploration of the Louisiana Territory.
- d. Explain James Madison's presidency in relation to the War of 1812 and the war's significance in the development of a national identity.
- e. Explain James Monroe's presidency in relation to the Monroe Doctrine.

SSUSH7 Investigate political, economic, and social developments during the Age of Jackson.

- a. Explain Jacksonian Democracy, including expanding suffrage, the Nullification Crisis and states' rights, and the Indian Removal Act.
- b. Explain how the North, South, and West were linked through industrial and economic expansion including Henry Clay and the American System.
- c. Explain the influence of the Second Great Awakening on social reform movements, including temperance, public education, and women's efforts to gain suffrage.
- d. Explain how the significance of slavery grew in American politics including slave rebellions and the rise of abolitionism.

SSUSH8 Explore the relationship between slavery, growing north-south divisions, and westward expansion that led to the outbreak of the Civil War.

- a. Explain the impact of the Missouri Compromise on the admission of states from the Louisiana Territory.
- b. Examine James K. Polk's presidency in the fulfillment of Manifest Destiny including the Texas annexation and Oregon.
- c. Analyze the impact of the Mexican War on growing sectionalism.
- d. Explain how the Compromise of 1850 arose out of territorial expansion and population growth.
- e. Evaluate the Kansas-Nebraska Act, the failure of popular sovereignty, *Scott v. Sanford*, John Brown's Raid on Harper's Ferry, and the election of 1860 as events leading to the Civil War.

SSUSH9 Evaluate key events, issues, and individuals related to the Civil War

- a. Explain the importance of the growing economic disparity between the North and the South through an examination of population, functioning railroads, and industrial output.
- b. Discuss Lincoln's purpose in using emergency powers to suspend habeas corpus, issuing the Emancipation Proclamation, and delivering the Gettysburg and Second Inaugural Addresses.
- c. Examine the influences of Ulysses S. Grant, Robert E. Lee, Thomas "Stonewall" Jackson, William T. Sherman, and Jefferson Davis.
- d. Explain the importance of Fort Sumter, Antietam, Vicksburg, Gettysburg, and Atlanta, as well as the impact of geography on these battles.

SSUSH10 Identify legal, political, and social dimensions of Reconstruction.

- a. Compare and contrast Presidential Reconstruction with Congressional Reconstruction, including the significance of Lincoln's assassination and Johnson's impeachment.
- b. Investigate the efforts of the Bureau of Refugees, Freedmen, and Abandoned Lands (the Freedmen's Bureau) to support poor whites, former slaves, and American Indians.
- c. Describe the significance of the Thirteenth, Fourteenth, and Fifteenth amendments.
- d. Explain the Black Codes, the Ku Klux Klan, and other forms of resistance to racial equality during Reconstruction.
- e. Analyze how the Presidential Election of 1876 marked the end of Reconstruction.

SSUSH11 Examine connections between the rise of big business, the growth of labor unions, and technological innovations.

- a. Explain the effects of railroads on other industries, including steel and oil.
- b. Examine the significance of John D. Rockefeller and Andrew Carnegie in the rise of trusts and monopolies.
- c. Examine the influence of key inventions on U.S. infrastructure, including but not limited to the telegraph, telephone, and electric light bulb.
- d. Describe Ellis and Angel Islands, the change in immigrants' origins and their influence on the economy, politics, and culture of the United States.
- e. Discuss the origins, growth, influence, and tactics of labor unions including the American Federation of Labor.

SSUSH12 Evaluate how westward expansion impacted the Plains Indians and fulfilled Manifest Destiny.

- a. Examine the construction of the transcontinental railroad including the use of immigrant labor.
- b. Evaluate how the growth of the western population and innovations in farming and ranching impacted Plains Indians.
- c. Explain the Plains Indians' resistance to western expansion of the United States and the consequences of their resistance.

SSUSH13 Evaluate efforts to reform American society and politics in the Progressive Era.

- a. Describe the influence of muckrakers on affecting change by bringing attention to social problems.
- b. Examine and explain the roles of women in reform movements.
- c. Connect the decision of *Plessy v. Ferguson* to the expansion of Jim Crow laws and the formation of the NAACP.
- d. Describe Progressive legislative actions including empowerment of the voter, labor laws, and the conservation movement.

SSUSH14 Explain America's evolving relationship with the world at the turn of the twentieth century.

- a. Describe how the Spanish-American War, war in the Philippines, and territorial expansion led to the debate over American imperialism.
- b. Examine U.S. involvement in Latin America, as reflected by the Roosevelt Corollary to the Monroe Doctrine and the creation of the Panama Canal.

SSUSH15 Analyze the origins and impact of U.S. involvement in World War I.

- a. Describe the movement from U.S. neutrality to engagement in World War I, including unrestricted submarine warfare and the Zimmerman Telegram.
- b. Explain the domestic impact of World War I, including the origins of the Great Migration, the Espionage Act, and socialist Eugene Debs.
- c. Explain Wilson's Fourteen Points and the debate over U.S. entry into the League of Nations.

SSUSH16 Investigate how political, economic, and cultural developments after WW I led to a shared national identity.

- a. Explain how fears of rising communism and socialism in the United States led to the Red Scare and immigrant restriction.
- b. Describe the effects of the Eighteenth and Nineteenth Amendments.
- c. Examine how mass production and advertising led to increasing consumerism, including Henry Ford and the automobile.
- d. Describe the impact of radio and movies as a unifying force in the national culture.
- e. Describe the emergence of modern forms of cultural expression including the origins of jazz and the Harlem Renaissance.

SSUSH17 Analyze the causes and consequences of the Great Depression.

- a. Describe the causes, including overproduction, underconsumption, and stock market speculation that led to the stock market crash of 1929 and the Great Depression.
- b. Explain factors (include over-farming and climate) that led to the Dust Bowl and the resulting movement and migration west.
- c. Explain the social and political impact of widespread unemployment that resulted in developments such as Hoovervilles.

SSUSH18 Evaluate Franklin D. Roosevelt's New Deal as a response to the Great Depression and compare how governmental programs aided those in need.

- a. Describe Roosevelt's attempts at relief, recovery, and reform reflected in various New Deal programs.
- b. Explain the passage of the Social Security Act as a part of the second New Deal.
- c. Analyze political challenges to Roosevelt's leadership and New Deal programs.
- d. Examine how Eleanor Roosevelt changed the role of the First Lady including development of New Deal programs to aid those in need.

SSUSH19 Examine the origins, major developments, and the domestic impact of World War II, including the growth of the federal government.

- a. Investigate the origins of U.S. involvement in the war including Lend-lease and the Japanese attack on Pearl Harbor.
- b. Examine the Pacific Theater including the difficulties the U.S. faced in delivering weapons, food, and medical supplies to troops, the Battle of Midway, Manhattan Project and the dropping of the atomic bombs.
- c. Examine the European Theater including difficulties the U.S. faced in delivering weapons, food, and medical supplies to troops, D-Day, and the Fall of Berlin.
- d. Investigate the domestic impact of the war including war mobilization, as indicated by rationing, wartime conversion, and the role of women and African Americans or Blacks.
- e. Examine Roosevelt's use of executive powers including the integration of defense industries and the internment of Japanese-Americans.

SSUSH20 Analyze U.S. international and domestic policies including their influences on technological advancements and social changes during the Truman and Eisenhower administrations.

- a. Analyze the international policies and actions developed as a response to the Cold War including containment, the Marshall Plan, the Truman Doctrine, and the Korean War.
- b. Connect major domestic issues to their social effects including the G.I. Bill, Truman's integration policies, McCarthyism, the National Interstate and Defense Highways Act, and *Brown v. Board of Education*.
- c. Examine the influence of Sputnik on U.S. technological innovations and education.

SSUSH21 Analyze U.S. international and domestic policies including their influences on technological advancements and social changes during the Kennedy and Johnson administrations

- a. Analyze the international policies and actions taken as a response to the Cold War including U.S. involvement in Cuba and the escalation of the war in Vietnam as a result of the Gulf of Tonkin Resolution.
- b. Connect major domestic issues to their social effects including the passage of civil rights legislation and Johnson's Great Society, following the assassination of John F. Kennedy.
- c. Describe the impact of television on American culture including the presidential debates (Kennedy/Nixon, 1960), news coverage of the Civil Rights Movement, the moon landing, and the war in Vietnam.
- d. Investigate the growth, influence, and tactics of civil rights groups, Martin Luther King, Jr., the Letter from Birmingham Jail, the I Have a Dream Speech, and Cesar Chavez.
- e. Describe the social and political turmoil of 1968 including the reactions to assassinations of Martin Luther King, Jr., and Robert F. Kennedy, the Tet Offensive, and the presidential election.

SSUSH22 Analyze U.S. international and domestic policies including their influences on technological advancements and social changes during the Nixon, Ford, and Carter administrations.

- a. Analyze the international policies and actions taken as a response to the Cold War including the opening of and establishment of diplomatic relations with China, the end of U.S. involvement in Vietnam, the War Powers Act, the Camp David Accords, and Carter's response to the 1979 Iranian Revolution and hostage crisis.
- b. Connect major domestic issues to their social effects including the creation of the Environmental Protection Agency, the emergence of the National Organization for Women, Nixon's resignation due to the Watergate scandal, and his pardon by Ford.

SSUSH23 Assess the political, economic, and technological changes during the Reagan, George H.W. Bush, Clinton, George W. Bush, and Obama administrations.

- a. Analyze challenges faced by recent presidents including the collapse of the Soviet Union, Clinton's impeachment, the attacks of September 11, 2001, and the war against terrorism.
- b. Examine economic policies of recent presidents including Reaganomics.
- c. Examine the influence of technological changes on society including the personal computer, the Internet, and social media.
- d. Examine the historic nature of the presidential election of 2008.

Economics

12 th Grade Economics	
Unit1 Title: The Choice is Yours (2- 2 ½ Weeks)	
Standard SSEF1 The student will explain why limited productive resources and unlimited wants result in scarcity, opportunity costs, and tradeoffs for individuals, businesses, and governments.	
Elements	Learning Targets I Can.....
A. Define scarcity as a basic condition that exists when unlimited wants exceed limited productive resources.	<p>_____ Define scarcity and provide specific examples of this concept in our society.</p> <p>_____ Describe the relation of scarcity to price and provide specific examples.</p>
B. Define and give examples of productive resources (factors of production) (e.g., land (natural), labor (human), capital (capital goods), entrepreneurship).	<p>_____ List the four factors of production.</p> <p>_____ Provide examples of the four factors of production in a typical American company.</p>
C. List a variety of strategies for allocating scarce resources.	<p>_____ Describe how businesses/people confront scarcity, using words (efficiency, specialization, allocation, opportunity cost, and trade-off)</p>
D. Define opportunity cost as the next best alternative given up when individuals, businesses, and governments confront scarcity by making choices.	<p>_____ Tell the difference b/w opportunity cost and trade-off.</p> <p>_____ Provide a word problem and define the opportunity cost and trade-off in the word problem.</p> <p>_____ Identify the trade-off and opportunity cost in a word problem.</p>
SSEF2 The student will give examples of how rational decision making entails comparing the marginal benefits and the marginal costs of an action.	
A. Illustrate by means of a production possibilities curve the trade offs between two options.	<p>_____ List the production possibility of each point on the production possibilities curve</p> <p>_____ Distinguish b/w the trade-offs and opportunity costs according to movement on the graph.</p>
B. Explain that rational decisions occur when the marginal benefits of an action equal or exceed the marginal costs.	<p>_____ Tell what marginal means in economic terms.</p> <p>_____ Distinguish b/w marginal cost and marginal benefit</p> <p>_____ Tell what drives businesses decision making in terms of adjusting production levels.</p>
SSEF6 The student will 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.	

A. Define productivity as the relationship of inputs to outputs.	_____ Define productivity with reference to inputs and outputs _____ Define inputs and outputs in relation to productivity
B. Give illustrations of investment in equipment and technology and explain their relationship to economic growth. C. Give examples of how investment in education can lead to a higher standard of living.	_____ Tell the positives and negatives of investment in equipment and technology in relation to economic growth. _____ Compare how different levels of education correlate to salary level, standard of living, job attainment, and working conditions.
SSEPF1 Personal Finance Economics SSEPF1 The student will apply rational decision making to personal spending and saving choices.	
Elements	Learning Targets
A. Explain that people respond to positive and negative incentives in predictable ways.	_____ State specific examples of positive and negative incentives _____ Predict consumer behavior in regards to positive and negative incentives
B. Use a rational decision making model to select one option over another.	_____ Judge the opportunity cost in comparison to the trade-off in regards to decision making
C. Create a savings or financial investment plan for a future goal.	_____ Explain the most important parts of a budget _____ Create a budget with various financial means

12th Grade Economics

Unit Title: Markets Not Just for Fleas and Stocks (3 Weeks)

SSEF3 The student will explain how specialization and voluntary exchange between buyers and sellers increase the satisfaction of both parties.

Elements	Learning Targets I Can
A. Give examples of how individuals and businesses specialize.	_____ Provide specific examples of how individuals and businesses specialize and why.
B. Explain that both parties gain as a result of voluntary, non-fraudulent exchange	_____ Prove that buyers and sellers help each other in the market.
SSEMI1 Microeconomic Concepts The student will describe how households	
A. Illustrate by means of a circular flow diagram, the Product market; the Resource (factor) market; the real flow of goods and services between and among	_____ Identify the four major components of the circular flow diagram

businesses, households, and government; and the flow of money.	<p>_____ Describe the markets and the exchanges of goods and services in each market</p> <p>_____ Determine in which part of the circular flow diagram goods and services are bought and produced</p>
B. Explain the role of money as a medium of exchange and how it facilitates exchange	<p>_____ Identify the three functions of money in the U.S. economy</p> <p>_____ Tell of how economic exchange took place before the creation of money</p>
SSEMI2 The student will explain how the Law of Demand, the Law of Supply, prices, and profits work to determine production and distribution in a market economy.	
A. Define the Law of Supply and the Law of Demand	<p>_____ Define the Law of Supply and the Law of Demand</p> <p>_____ Distinguish between Supply curves and demand curves via graph</p>
B. Describe the role of buyers and sellers in determining market clearing price.	<p>_____ Identify the equilibrium price and equilibrium quantity on a graph and state each number.</p> <p>_____ List and identify factors that cause shift in supply and demand curves and which movement each factor will dictate. Also tell what happens to equilibrium price when both curves move in either direction.</p>
C. Illustrate on a graph how supply and demand determine equilibrium price and quantity.	<p>_____ Identify how both supply and demand curves move to show change. (Increase and Decrease)</p> <p>_____ Determine the market clearing price</p>
D. Explain how prices serve as incentives in a market economy.	<p>_____ Discuss how prices are used in a market to communicate between buyers and sellers</p>
SSEMI3 The student will explain how markets, prices, and competition influence economic behavior	
Elements	Learning Targets
A. Identify and illustrate on a graph factors that cause changes in market supply and demand	<p>_____ List and describe factors that cause supply and demand curves to shift and which direction each factor makes the curves move.</p>
B. Explain and illustrate on a graph how price floors create surpluses and price ceilings create shortages.	<p>_____ Explain and describe price floors and price ceilings on a graph and what each are a danger of creating</p>
C. Define price elasticity of demand and supply.	<p>_____ List specific examples of elastic products</p> <p>_____ List specific examples of inelastic products</p> <p>_____ Identify products as either elastic or inelastic and tell why each are elastic or inelastic</p> <p>_____ Illustrate by graph what supply and demand curves look like for elastic and inelastic products.</p>

SSEMI4 The student will explain the organization and role of business and analyze the four types of market structures in the U.S. economy.

<p>A. Compare and contrast three forms of business organization—sole proprietorship, partnership, and corporation.</p>	<p>_____ List and define the three business types.</p> <p>_____ List the advantages and disadvantages of each business type (Selling stock, longevity, startup, specialization, decision making, capital, ability to raise large sums of money, etc.)</p>
<p>B. Explain the role of profit as an incentive for entrepreneurs.</p>	<p>_____ Describe profit as the primary drive for businesses</p>
<p>C. Identify the basic characteristics of monopoly, oligopoly, monopolistic competition, and pure competition.</p>	<p>_____ List and define the four market types</p> <p>_____ Provide specific examples of businesses that fall into these market types.</p> <p>_____ Number 1-4 these market types and in order of most competitive to least competitive.</p>

12th Grade World Economics

Unit Title: Government and the Economy: Superhero or Villain?

SSEF4 Compare and Contrast different economic systems and explain how they answer the three basic economic questions. (3 Weeks)

Elements	Learning Targets I Can.....
<p>A. Compare command, market, and mixed economic systems with regard to private ownership, profit motive, consumer sovereignty, competition, and government regulation.</p>	<p>_____ Compare and contrast mixed, market, and command economic systems</p> <p>_____ Describe how competition, regulation, privatization, and deregulation works in each of the three systems</p> <p>_____ Label each of these economic systems in terms of competition.</p>
<p>B. Evaluate how well each type of system answers the three economic questions and meets the broad social and economic goals of freedom, security, equity, growth, efficiency, and stability.</p>	<p>_____ Identify the three basic economic questions to be answered and how each economic system type answers those questions.</p> <p>_____ List and describe the six goals of the U.S. economy.</p>

SSEF5 The student will describe the roles of government in a market economy.

A. Explain why government provides public goods and services, redistributes income, protects property rights, and resolves market failures.	<p>_____ Describe what types of goods and services does the government provide and why they are provided.</p> <p>_____ Define market failures, provides examples, and who solves them</p>
B. Give examples of government regulation and deregulation and their effects on consumers and producers	<p>_____ Provide examples of government regulation and deregulation</p> <p>_____ Describe how government regulation and deregulation can affect competition, consumers, producers, and prices.</p>
SSEMA1 The student will illustrate the means by which economic activity is measured.	
A. Explain that overall levels of income, employment, and prices are determined by the spending and production decisions of households, businesses, government, and net exports	<p>_____ Demonstrate knowledge of how government and household spending affects economic health.</p>
B. Define Gross Domestic Product (GDP), economic growth, unemployment, Consumer Price Index (CPI), inflation, stagflation, and aggregate supply and aggregate demand.	<p>_____ List and define terms which are used to measure the overall health of the economy</p> <p>_____ Determine the level of each of these at the different stages of the business cycle.</p>
C. Explain how economic growth, inflation, and unemployment are calculated.	<p>_____ Tell how unemployment is calculated</p> <p>_____ Describe how unemployment is calculated</p>
D. Identify structural, cyclical, and frictional unemployment.	<p>_____ List, define, and provide examples of the four unemployment</p> <p>_____ Explain which of these unemployment types is the worst and why.</p>
E. Define the stages of the business cycle, include peak, contraction, trough, recovery, expansion as well as recession and depression.	<p>_____ List, illustrate, and define the five stages of the business cycle</p> <p>_____ Note the performance of GDP, demand, and the unemployment rate at each.</p>
F. Describe the difference between the national debt and government deficits.	<p>_____ Note the key difference b/w national debt and government deficits.</p> <p>_____ Explain that government deficits are the result of trade deficits, and government surpluses are the results of trade surpluses.</p>
SSEMA2 The student will explain the role and functions of the Federal Reserve System.	
A. Describe the organization of the Federal Reserve System.	<p>_____ Describe the organization of the Federal Reserve System and its vital function in the U.S. economy.</p>
B. Define monetary policy.	<p>_____ Describe monetary policy</p>
C. Describe how the Federal Reserve uses the tools of monetary policy to promote price stability, full employment, and economic growth.	<p>_____ Define monetary policy and provide specific examples of the FED using monetary policy and note what each does to the money</p>

	supply and health of the economy (Interest rates, government securities, discount rate, etc.)
SSEMA3 The student will explain how the government uses fiscal policy to promote price stability, full employment, and economic growth.	
A. Define fiscal policy.	_____ Define fiscal policy and provide specific examples of the government's use of fiscal policy to promote specific actions
B. Explain the government's taxing and spending decisions.	_____ Identify the three tax types and provide specific examples of each. _____ Explain how government taxing relates to demand, prices, GDP, and employment rate.
SSEPF3 The student will explain how changes in monetary and fiscal policy can have an impact on an individual's spending and saving choices.	
A. Give examples of who benefits and who loses from inflation.	_____ Define inflation and specifically distinguish b/w winners and losers of inflation (List examples)
B. Define progressive, regressive, and proportional taxes.	_____ Identify the three tax types and provide specific examples of each.
C. Explain how an increase in sales tax affects different income groups.	_____ Define sales tax as a regressive tax and accurately explain how a sales tax hurts the poor more than the wealthy.

12th Grade Economics	
Unit Title: International Trade of Mystery	
SSEIN1 The student will explain why individuals, businesses, and governments trade goods and services (3 ½ Weeks)	
Elements	Learning Targets
A. Define and distinguish between absolute advantage and comparative advantage.	_____ Accurately describe the difference between comparative advantage and absolute advantage _____ Accurately determine the comparative and absolute advantage between nations on a table and by word problem.
B. Explain that most trade takes place because of comparative advantage in the production of a good or service	_____ Identify the important reasons that countries trade
C. Explain the difference between balance of trade and balance of payments.	_____ Distinguish between balance of trade and balance of payments _____ Describe the positives and negatives of the United States balance of trade and payments.
SSEIN2 The student will explain why countries sometimes erect trade barriers and sometimes advocate free trade.	

A. Define trade barriers as tariffs, quotas, embargoes, standards, and subsidies.	_____ Define and distinguish between important trade barriers---embargoes, tariffs, quotas, standards, & subsidies
B. Identify costs and benefits of trade barriers over time.	_____ Explain the positives and negative effects that trade barriers would have on the United States.
C. List specific examples of trade barriers.	_____ List specific examples of trade barriers
D. List specific examples of trading blocks such as the EU, NAFTA, and ASEAN.	_____ Identify important trading blocks and acronyms
E. Evaluate arguments for and against free trade	_____ Describe arguments which are for and against free trade (All six)
SSEIN3 The student will explain how changes in exchange rates can have an impact on the purchasing power of individuals in the United States and in other countries.	
A. Define exchange rate as the price of one nation's currency in terms of another nation's currency	_____ Define exchange rate _____ Accurately describe why an exchange rate is needed
B. Locate information on exchange rates.	_____ Determine which currency is worth the most in accordance to an exchange rate table.
C. Interpret exchange rate tables.	_____ Make meaning of an exchange rate table
D. Explain why, when exchange rates change, some groups benefit and others lose.	_____ Identify the affects of changing exchange rate values on International Trade

12th Grade Economics	
Unit Title: Let's Make it Personal (4 Weeks)	
SSEPF2 The student will explain that banks and other financial institutions are businesses that channel funds from savers to investors.	
Elements	Learning Targets I Can
A. Compare services offered by different financial institutions.	_____ Explain the positives and negatives of credit along with its dangers.

B. Explain reasons for the spread between interest charged and interest earned.	<p>_____ Identify various loan types along with typical interest rates.</p> <p>_____ Tell why banks pay interest in savings accts, various checking accts, and bonds?</p>
C. Give examples of the direct relationship between risk and return.	<p>_____ Define risk, return, interest, variable rate, fixed rate.</p> <p>_____ Provide examples of the direct relationship between risk and return.</p>
D. Evaluate a variety of savings and investment options; include stocks, bonds, and mutual funds.	<p>_____ Define, compare, and contrast the various investment options. (Stocks, bonds, mutual funds, saving accts. Real Estate, etc)</p> <p>_____ List each of these as high risk or low risk and how does this level of risk relate to return</p> <p>_____ Tell which of these is the most liquid and why.</p>
SSEPF4 The student will evaluate the costs and benefits of using credit.	
A. List factors that affect credit worthiness.	<p>_____ List the details found on a credit report.</p> <p>_____ Tell why each of these is important in relation to job attainment or receiving a loan.</p>
B. Compare interest rates on loans and credit cards from different institutions.	<p>_____ Distinguish between good and bad interest rates.</p> <p>_____ Tell which loan types typically have higher interest rates.</p>
C. Explain the difference between simple and compound interest rates.	<p>_____ Accurately explain the difference between simple and compound interest.</p> <p>_____ Distinguish between variable and fixed interest rates.</p> <p>_____ Describe why there is a spread between interest charged and interest earned.</p>
SSEPF5 The student will describe how insurance and other risk-management strategies protect against financial loss.	
A. List various types of insurance such as automobile, health, life, disability, and property.	<p>_____ Identify the differences and benefits of various insurance types. (Automobile, health, life, disability, property)</p> <p>_____ Distinguish between whole life insurance and term life insurance</p> <p>_____ Identify the various types of automobile insurance.</p>
B. Explain the costs and benefits associated with different types of insurance; include deductibles, premiums, shared liability, and asset protection.	<p>_____ Define various insurance and loan terms, premium, principal, deductible, policy</p>
SSEPF6 The student will describe how the earnings of workers are determined in the marketplace.	

A. Identify skills that are required to be successful in the workplace.	_____ Tell how education level relates to job level attainment and skills
B. Explain the significance of investment in education, training, and skill development	_____ Tell how education level relates to job level attainment and skills

Parts 2, 3, and 4 of the PLC Process

Part 2: How will we know when our students have learned?

FHSCCA teachers, as members of specific PLCs, will meet weekly to identify what each standard will look like when the student has mastered it. Together, they will ensure that each student will be held to the same standard of mastery regardless of the assigned teacher. Common formative and summative assessments, aligned to the power standards, have been created and are administered as determined by each PLC.

Students will take a universal screener (MAP) three times a year. The results of this assessment will be an indication of student growth and level of mastery. The GA Milestones End of Course Assessments will be another component of each student's level of mastery and growth profile for the year.

Part 3: What will we do if they do not learn?

Teachers analyze data from common formative assessments (CFA) to judge whether a student has learned or not. When additional time, practice, and/or instruction are indicated and implemented, students are reassessed for the deficit standard(s) to determine whether the student has responded to the additional support. If students still do not master the content, the response to intervention (RTI) process may begin.

Part 4: What will we do if they already know it?

Once again, teachers use CFAs and other formative data to determine when students already know content and thus do not need to spend additional time on the content. PLCs will work together to determine how to best meet the needs of individual students who have already mastered the content.

References

Georgia Department of Education. (2016, July). *Georgia Standards of Excellence: Mathematics*.

Georgia Standards of Excellence (GSE) - Official GaDOE

Site. <https://www.georgiastandards.org/Georgia-Standards/Documents/High-School-Mathematics-Standards.pdf>

Georgia Department of Education. (n.d.a). *English language arts Georgia Standards of Excellence*

(GSE) 9 - 12. Georgia Standards of Excellence (GSE) - Official GaDOE

Site. <https://www.georgiastandards.org/Georgia-Standards/Pages/ELA-9-12.aspx>

Georgia Department of Education. (n.d.b). *Science*. [https://www.gadoe.org/Curriculum-](https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Pages/Science.aspx)

[Instruction-and-Assessment/Curriculum-and-Instruction/Pages/Science.aspx](https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Pages/Science.aspx)

Georgia Department of Education. (n.d.c). *Social studies Georgia standards of excellence (GSE)*

9-12. Georgia Standards of Excellence (GSE) - Official GaDOE

Site. <https://www.georgiastandards.org/Georgia-Standards/Pages/Social-Studies-9-12.aspx>