

**Genesee Valley Central School**  
**2025-26 Grades 9-12 Priority Standards and Skills Focus**

***As Identified by the Following Team:***

Karen Bentley	Tracie Campbell	Bridget Chichester	Kyle Dougherty
Kim Douglas	Alayna Ebert	Sarah Horne	Kayla Marsh
Mike Mead	Paula Roberts	Zach Smith	Nanette Vossler
Carolyn Wright			

***Mathematics Content Focus (continued on next page)***

**Algebra I**

- AI-F.BF.3a.i Using  $f(x) + k$ ,  $k f(x)$ , and  $f(x + k)$ : identify the effect on the graph when replacing  $f(x)$  by  $f(x) + k$ ,  $k f(x)$ , and  $f(x + k)$  for specific values of  $k$  (both positive and negative)
- AI-.REI.6a Solve systems of linear equations in two variables both algebraically and graphically.
- AI-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.

**Algebra I**

**A/IB Special Class/Special Education**

- A1.A.SSE.3c Use the properties of exponents to rewrite exponential expressions.
- Skills Focus #1: Using a graphic calculator.
- Skills Focus #2: Reading, interpreting, and solving word problems.
- Skills Focus #3: Learning content-specific vocabulary.
- Skills Focus #4: Identifying the steps necessary to solve multiple-step problems.

## ***Mathematics Content Focus***

### **Algebra II**

- A.APR.2 Apply the Remainder Theorem: For a polynomial  $p(x)$  and a number  $a$ , the remainder on division by  $x - a$  is  $p(a)$ , so  $p(a) = 0$  if and only if  $(x - a)$  is a factor of  $p(x)$ .
- A.APR.3 Identify zeros of polynomial functions when suitable factorizations are available.
- A.REI.11 Given the equations  $y = f(x)$  and  $y = g(x)$ :
- i) recognize that each  $x$ -coordinate of the intersection(s) is the solution to the equation  $f(x) = g(x)$ ;
  - ii) find the solutions approximately using technology to graph the functions or make tables of values;
  - iii) find the solution of  $f(x) < g(x)$  or  $f(x) \leq g(x)$  graphically; and
  - iv) interpret the solution in context. ★

### **Geometry**

- GEO-G.CO.11 Prove and apply theorems about parallelograms.
- GEO-G.SRT.9 Justify and apply the formula  $A = \frac{1}{2}ab \sin(C)$  to find the area of any triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.
- GEO-G.GPE.1a Derive the equation of a circle of given center and radius using the Pythagorean Theorem. Find the center and radius of a circle, given the equation of the circle.

## *English Language Arts Content Focus (continued on next page)*

### **English Language Arts (Grade 9)**

- R2 Identify and analyze the development of the central idea of a text over the course of the text, including how it emerges and is shaped and refined by specific details; objectively and accurately summarize a text. (RL & RI)
- R3 Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
- In literary texts, analyze how complex and/or dynamic characters develop, interact with other characters, advance the plot, or develop a theme. (RL)
- In informational texts, analyze how the author unfolds an analysis or argument, including the sequence, the introduction and development of ideas, and the connections that exist. (RI)
- L4 Determine the meaning of unknown words and phrases choosing flexibility from a range of strategies.

### **English Language Arts (Grade 10) – continued on next page**

- 10.R.2 Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. (RI & RL)
- 10.RL.3 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.
- 10.RI.8: 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.
- 10.W.1 Write arguments to support claims that analyze substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- 10.W.1a: Introduce precise claim(s), distinguish the claim(s) from counterclaims, establish and organize clear relationships among claim(s), counterclaim(s), reasons, and evidence.
- 10.W.1b: Develop claim(s) and counterclaims in a balanced manner, supplying evidence for each while pointing out the strengths and limitations of both, anticipating the audience's knowledge level and concerns.
- 9-10W1c: Use precise language and content-specific vocabulary to express the appropriate complexity of the topic.

## ***English Language Arts Content Focus***

### **English Language Arts (Grade 10) – continued from previous page**

- 10.W.1d: Use appropriate and varied transitions to make critical connections and distinctions, create cohesion, and clarify the relationships among complex ideas and concepts.
- 9-10W1e: Provide a concluding statement or section that explains the significance of the argument presented.
- 10.W.1f: Maintain a style and tone appropriate to the writing task.

### **English Language Arts (Grade 11)**

- R.2 Determine two or more themes or central ideas in a text and analyze their development, including how they emerge and are shaped and refined by specific details; objectively and accurately summarize a complex text. (RI & RL)
- RI.3 In informational texts, analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop.
- L.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases, choosing flexibly from a range of strategies.

### **English Language Arts (Grades 9, 10, 11) Special Class/Special Education**

- 9-10 R4 Vocabulary - Determine the meaning of words or phrases they are used in the text including figurative and connotative meanings.
- 9-10 R1 Comprehension Skills - Cite strong and thorough textual evidence to support analysis of what the text says explicitly and implicitly to make logical inferences.
- Skill Focus #1: Literary Elements (Examples- Setting, Characterization, plot, Rising Action, Falling Action, Exposition...)

## *Science Content Focus (continued on next page)*

### **Earth Science**

- HS-ESS1-6 Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history. [Clarification Statement: Emphasis is on using available evidence within the solar system to reconstruct the early history of Earth, which formed along with the rest of the solar system 4.6 billion years ago. Examples of evidence include the absolute ages of ancient materials (obtained by radiometric dating of meteorites, moon rocks, and Earth's rocks and minerals), the sizes and compositions of solar system objects, and the impact cratering record of planetary surfaces.]
- HS-ESS1-7 Construct an explanation using evidence to support the claim that the phases of the moon, eclipses, tides and seasons change cyclically. [Clarification Statement: Emphasis of the explanation should include how the relative positions of the moon in its orbit, Earth, and the Sun cause different phases, types of eclipses or strength of tides. Examples of evidence could include various representations of relative positions of the Sun, Earth and moon. [Assessment Boundary: Assessment does not include mathematical computations to support explanations but rather relies on conceptual modeling using diagrams to show how celestial bodies interact to create these cyclical changes.]
- HS-ESS2-3 Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection. [Clarification Statement: Emphasis is on both a one-dimensional model of Earth, with radial layers determined by density, and a three-dimensional model, which is controlled by mantle convection and the resulting plate tectonics. Rocks and minerals can be identified and classified using various tests and protocols that determine their physical and chemical properties. Examples of evidence include maps of Earth's three-dimensional structure obtained from seismic waves, records of the rate of change of Earth's magnetic field (as constraints on convection in the outer core), and identification of the composition of Earth's layers from high-pressure laboratory experiments.]

**Key Idea Focus:** Observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide insight into phenomena.

### **Instructional Skills:**

- Focus #1: Improve student use of the NEW Earth Science Reference Tables.
- Focus #2: Improve use of scientific vocabulary.
- Focus #3: Improve work with multistep problem-solving.

## *Science Content Focus*

### **Living Environment**

HS-LS1-2 Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

#### **Instructional Skills:**

Focus #1: Focus on interacting body systems maintaining homeostasis.

Focus #2: Nervous system communicating using nerve cell chemicals.

HS-LS2-5 Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere.

HS-LS2-8 Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.

#### **Instructional Skills:**

Focus #1: Broad patterns in behavior lead to greater reproductive success.

### **Physics**

4PS.4.1n A circuit is a closed path in which a current can exist. Use conventional current.

4PS.4.31 Diffraction occurs when waves pass by obstacles or through openings. The wavelength of the incident wave and the size of the obstacle or opening affect how the wave spreads out.

4PS.5.1d An object in linear motion may travel with a constant velocity or with acceleration. Testing of acceleration will be limited to cases in which acceleration is constant.

4PS.5.11 Weight is the gravitational force with which a planet attracts a mass. The mass of an object is independent of the gravitational field in which it is located.

## ***Social Studies Content Focus (continued on next page)***

### **Global 9**

- 2.1 The study of world history requires an understanding of world cultures and civilizations, including an analysis of important ideas, social and cultural values, beliefs, and traditions. This study also examines the human condition and the connections and interactions of people across time and space, and the ways different people view the same event or issue from a variety of perspectives.
- 2.1a Define culture and civilization, explaining how they developed and changed over time. Investigate the various components of cultures and civilizations including social customs, norms, values, and traditions; political systems; economic systems; religions and spiritual beliefs; and socialization or educational practices.
- 2.2 Establishing timeframes, exploring different periodization, examining themes across time and within cultures, and focusing on important turning points in world history help organize the study of world cultures and civilizations.
- 2.3 Study of the major social, political, cultural, and religious developments in world history involves learning about the important roles and contributions of individuals and groups.
- 2.3a Analyze the roles and contributions of individuals and groups to social, political, economic, cultural, and religious practices and activities.

#### **General and Special Education Skills Focus #1:**

**Content-Specific Vocabulary** – Determine the meanings of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.

#### **General and Special Education Skills Focus #2:**

**Interpret/Analyze Documents** – Identify, describe, and evaluate evidence about events from diverse sources (including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions and other primary and secondary sources). Make inferences and draw conclusions from evidence.

#### **General and Special Education Skills Focus #3:**

Understand overarching historical themes, patterns, and interactions.

#### **Special Education Skills Focus #4:**

Analyze documents and draw conclusions from evidence.

## ***Social Studies Content Focus (continued on next page)***

### **Global 10 History & Geography**

- 2.1 The study of world history requires an understanding of world cultures and civilizations, including an analysis of important ideas, social and cultural values, beliefs, and traditions. This study also examines the human condition and the connections and interactions of people across time and space, and the ways different people view the same event or issue from a variety of perspectives.
- 2.2 Establishing timeframes, exploring different periodization, examining themes across time and within cultures, and focusing on important turning points in world history help organize the study of world cultures and civilizations.
- 2.3 Study of the major social, political, cultural, and religious developments in world history involves learning about the important roles and contributions of individuals and groups.
- 2.4 The skills of historical analysis include the ability to investigate differing and competing interpretations of the theories of history, hypothesize about why interpretations change over time, explain the importance of historical evidence, and understand the concepts of change and continuity over time.

Skills Focus #1: Content-specific vocabulary – Determine the meanings of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.

Skills Focus #2: Interpret documents – Identify, describe, and evaluate evidence about events from diverse sources including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions and other primary and secondary sources.

Skills Focus #3: Analyze documents – Make inferences and draw conclusions from evidence.

### **Global Studies (Grades 9, 10) and United States History & Government Special Class/Special Education**

Skills Focus #1: Content-specific vocabulary – Determine the meanings of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.

Skills Focus #2: Interpret documents – Identify, describe, and evaluate evidence about events from diverse sources including written documents, works of art, photographs, charts and graphs, artifacts, oral traditions and other primary and secondary sources.

Skills Focus #3: Analyze documents – Make inferences and draw conclusions from evidence.

## ***Social Studies Content Focus***

### **United States History and Government**

- 11.2a.1 Students will examine British efforts to gain greater political and economic control, such as the Proclamation of 1763, the Stamp Act, the Townsend Acts, the Tea Act, the Boston Massacre, and the Coercive Acts, and colonial reactions to these efforts.
- 11.5b.1 Students will examine demographic trends associated with urbanization and immigration between 1840 and 1920, including push-pull factors regarding Irish immigration and immigration from southern and eastern Europe.
- 11.8b.2 Students will examine the reasons for President Roosevelt’s executive order for Japanese removal, the impact of removal on Japanese people living in the United States, and the Supreme Court’s decision in *Korematsu v. United States*(1944).

### **Participation in Government/Economics Special Class/Special Education**

- 12.G1 Foundations of American Democracy. (Constitution, Branches of Government, and Federalism)
  - 12.G3 Rights, Responsibilities and Duties of Citizenship (Registering to Vote, Voting Process, Political Parties, Taxes, Jury Duty, Political Campaigns)
  - 12.E1 Individual Responsibility and the Economy: individuals should set personal financial goals, recognize their income needs and debt obligations, and know how to utilize effective budgeting, borrowing, and investment strategies to maximize wellbeing.
- Skill Focus #1: Content Specific Vocabulary-Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.

## ***Technology Content Focus (continued on next page)***

### **AgTech 8**

MST 5.T.Ed: Engineering Design

- Part B: Locate and utilize a range of printed electronic and human information resources. (Research Based Ideation)
- Part D: Develop plans including drawings with measurements and details of construction and construct a model of the solution, exhibiting a degree of craftsmanship.

Instructional Skills Focus: Measuring, fractional mathematics (7.EE.3), production, planning and resourcefulness.

WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

RST.9-10.4 Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context.

Instructional Skills Focus: Reading, following procedures, writing complete sentences, and vocabulary.

### **9-12 Electives**

WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

RST.9-10.4 Determine the meaning of symbols, key terms, and other domain specific words and phrases as they are used in a specific scientific or technical context.

Instructional Skills Focus: Reading, following procedures, writing complete sentences, and vocabulary.

### **Design for Entertainment & Ag**

MST 5.2 Choose and use resources for a specific purpose, based on an understanding of properties, cost, availability, and environmental impact.

MST 5.5 Understand the contributions of people of different genders, races, and ethnic groups to technological development.

## ***Technology Content Focus***

### **Small Engines/Ag Mechanics**

PST.03.01. Troubleshoot, service and repair components of internal combustion engines using manufacturers' guidelines.

5.6.MT.c Assume leadership responsibilities within a structured group activity.

Instructional Skills Focus: Accessing/utilizing repair manuals and interpreting diagrams (electrical, hydraulic, etc.)

### **Natural/Physical Science**

NRS.02.04.02b Assess the importance of the use of natural resources on local, state and national economics.

CS.04.01.01b Analyze available practices to steward natural resources in AFNR systems (e.g., wildlife and land conservation, soil and water practices, ecosystem management, etc.).

ESS.01.02.02a, NRS.01.02.01.b → Identification Standards

### **Animal Science**

AS.01.02 Assess and select animal production, marketing, and management methods based upon effectiveness and potential social and environmental impacts.

AS.02 Utilize best practice protocols based upon animal behaviors for animal husbandry and welfare.

AS.06 Classify, evaluate and select animals based on anatomical and physiological characteristics.