

## **Agriculture**

**PROGRAM CONCENTRATION:** Agriculture

**COURSE TITLE:** Middle School Agriculture Education (Eighth Grade)

### **COURSE DESCRIPTION:**

The goal of this course is to provide middle school students with an introduction to agricultural leadership by developing work ethic, communication, critical thinking, and team building skills. This also reinforces the FFA mission statement of promoting “premier leadership, personal growth, and career success through agricultural education”.

In this course, middle school students will build a knowledge base for the Horticulture/Plant Science Pathway Program of study. The major concepts of plant and horticulture science are introduced. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs. This pre-pathway will also provide a foundation for students to explore career possibilities related to the area of horticulture/plant science.

This course will also offer middle school students an introduction for the Forestry/ Natural Resource Pathway Program of study. The major concepts of forestry and natural resources are introduced. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities. This pre-pathway will also provide a foundation for students to explore career possibilities related to the area of forestry and natural resources.

Another goal of this course is to provide middle school students with an introduction for the Agriscience Pathway Program of study. The major concepts of agriscience are introduced. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities. This pre-pathway will also provide a foundation for students to explore career possibilities related to the area of agriscience.

### **INTRODUCTION TO AGRICULTURAL LEADERSHIP**

Upon completion of this unit students will be able to analyze different aspects of the agricultural industry and how it affects their daily lives. Students will have a working knowledge of American agricultural history, Georgia agriculture, and the significance of the agricultural education program. Students will be aware of the various career opportunities in the agriculture industry.

#### **MSAGED8-1: Identify the 3 main parts of the agricultural education program.**

- a) Define Supervised Agricultural Experience Programs.
- b) Define FFA Leadership.
- c) Define agricultural education.

**ACADEMIC STANDARDS:**

*S6CS2 – Students will use standard safety practices for all classroom laboratory and field investigations.*

**SAMPLE TASKS:**

- Draw the 3 interlocking circles (FFA, SAE, Class/Lab Instruction).

**MSAGED8-2: Develop an understanding of the FFA organization.**

- a) Explain the purpose of the FFA.
- b) Discuss the history and important dates of the FFA.
- c) Explain the FFA Creed.

**ACADEMIC STANDARDS:**

*S6CS8 – Students will investigate the characteristics of scientific knowledge and how it is achieved.*

**SAMPLE TASKS:**

- Have a mock creed speaking contest.
- Invite a state or area officer in to speak.
- Complete a Discovery Degree application.

**MSAGED8-3: Develop leadership skills, characteristics, and responsibilities.**

- a) Demonstrate knowledge of parliamentary procedure.
- b) Prepare for effective citizenship and participation on our democratic society.

**ACADEMIC STANDARDS:**

*M6D1 – Students will pose questions, collect data, represent and analyze the data, and interpret results.*

**SAMPLE TASKS:**

- Hold mock elections.
- Hold a mock parliamentary procedure contest.

- Interview or research a political candidate.
- Identify the characteristics of a leader

**MSAGED8-4: Develop and use verbal and nonverbal communication skills.**

- a) Compare and contrast verbal and nonverbal communication.
- b) Develop effective people skills.

**ACADEMIC STANDARDS:**

*M6D1 – Students will pose questions, collect data, represent and analyze the data, and interpret results.*

**SAMPLE TASKS:**

- Hand Shake
- Public Speaking Charades
- Skit over appropriate and inappropriate communication skills

**MSAGED8-5: Develop work ethic and employable skills through agricultural education and leadership programs.**

- a) Maintain accurate records on Supervised Agricultural Experience project.
- b) Demonstrate proper workplace etiquette.
- c) Understand the job application process.

**SAMPLE TASKS:**

- Host job shadow day.
- Conduct a job skills seminar with resume, cover letter, application, interview, and career portfolio.
- Perform mock interviews, proper dress and workplace ethics skits.

**PLANT SCIENCE PRE-PATHWAY:**

Upon completion of this unit students will be able to define and explain the horticulture industry and identify plant parts and their functions. Students will also be able define methods of plant propagation either by sexual or asexual reproduction and identify plant growth requirements.

**MSAGED8-6: Students will define and explain the horticulture industry.**

- a) Define horticulture.
- b) Compare/contrast the horticulture and agriculture industry.
- c) Research careers in the plant science/horticulture industry.

**ACADEMIC STANDARDS:**

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

*M8P5 – Students will represent mathematics in multiple ways.*

*S8CS1 – Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.*

*S8CS6 – Students will communicate scientific ideas and activities clearly.*

**SAMPLE TASKS:**

- Research and write a report on a career that involves horticulture at [www.agripedia.com](http://www.agripedia.com) and present it to the class. Include information on salaries, sample tasks, and what preparation is needed.
- Interview a horticulture professional.
- Visit the Discovery Channel for Mike Rowe’s Dirty Jobs episodes on plant science.
- Have students create an informational brochure on the horticulture industry.

**MSAGED8-7: Students will identify plant parts and their functions.**

- a) Identify vegetative parts of the plant (roots, stems, leaves) and their functions.
- b) Identify and use terms that describe reproductive parts of the plant (flower and seed) and their functions.

**ACADEMIC STANDARDS:**

*S7L1 – Students will investigate the diversity of living organisms and how they can be compared scientifically.*

*S7L2 – Students will describe the structure and function of cells, tissues, organs, and organ systems.*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 9 Lesson 2 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Eat plant parts- lettuce (leaves), celery (stems), carrots (roots).
- Hold a scavenger hunt on finding different types of roots, leaf arrangements, and stems.
- Pull weeds around school and tape to paper. Students draw lines and label parts of plants.
- Make model flowers with modeling clay and label parts.
- Use azalea or lily flowers for great flower dissection.
- Dissect bean seeds. (Hint: soak before dissection).

**MSAGED8-8: Students will define methods of plant propagation either by sexual or asexual reproduction.**

- a) Demonstrate sexual and asexual plant reproduction methods.
- b) Compare and contrast sexual and asexual plant reproduction methods.

**ACADEMIC STANDARDS:**

*S7CS2 – Students will use standard safety practices for all classroom laboratory and field investigations.*

*S7L3 – Students will recognize how biological traits are passed on to successive generations.*

*M8D4 – Students will organize, interpret, and make inferences from statistical data.*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P3 – Students will communicate mathematically.*

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 9 lesson 4 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Plant seeds in various containers (Ziploc bags, film canisters, etc.) with various growing media (wet paper towels, cotton balls, soil, etc.) and monitor germination.
- Take stem, leaf, and root cuttings from Wandering Jew, Jade, Swedish ivy, Pothos, Heartleaf Philodendron, Thanksgiving Cactus, and/or Spider Plant.

**MSAGED8-9: Students will identify plant growth requirements.**

- a) Explain what nutrients plants need.
- b) Describe the environmental conditions for plant growth (light, air, water, soil).
- c) Explain the process of photosynthesis.

**ACADEMIC STANDARDS:**

*S7L1 – Students will investigate the diversity of living organisms and how they can be compared scientifically.*

*S8CS4 – Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P3 – Students will communicate mathematically.*

*M8D2 – Students will determine the number of outcomes related to a given event.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 9 lesson 3; [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Georgia Middle School Ag Ed Curriculum Unit 9 lesson 5; [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Georgia Middle School Ag Ed Curriculum Unit 9 lesson 7; [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Compare and contrast the use of different growing mediums, depths, and amounts of light and water used.
- Create plant mazes out of shoe boxes for plants to grow through. Place the plant/planted seed on one side of the box opposite a hole on the other side of the box. Keep the box covered, with light entering only thorough the end hole. (Phototropism)
- Raise seedlings in clear plastic glasses lined with wet paper towels. When the seedlings are well developed and have their first set of leaves, tie strings around the glasses. Hang them in different positions. Keep the paper moist. (Geotropism)

**FORESTRY/ NATURAL RESOURCE PRE-PATHWAY:**

Upon completion of this unit students will be able to define the forestry and natural resource industry and identify the importance of the forest. Students will also be able to classify and list examples of trees specific to our region and be able to describe and identify local wildlife and their habitats.

**MSAGED8-10: Students will define the forestry & natural resource industry.**

- a) Define Forestry and Natural Resources.
- b) List and explain the different types of natural resources.
- c) Compare/contrast the forestry and natural resource and agriculture industry.
- d) Research careers in the forestry/ natural resource industry.

### **ACADEMIC STANDARDS:**

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

*M8P5 – Students will represent mathematics in multiple ways.*

*S8CS1 – Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.*

*S8CS4 – Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.*

### **SAMPLE TASKS:**

- Research and write a report on a career that involves forestry and natural resource at [www.agripedia.com](http://www.agripedia.com) and present it to the class. Include information on salaries, sample tasks, and what preparation is needed.
- Interview a forestry/ natural resource professional.
- Visit the Discovery Channel for Mike Rowe's Dirty Jobs episodes on forestry and natural resources.
- Visit Bill Nye the Science Guy for Forestry/ Natural Resource videos.
- Have students create an informational brochure on a wildlife species or a state park.
- Visit <http://www.nps.gov/webrangers> for information and activities about national parks

**MSAGED8-11: Students will identify the importance of the forest.**

- a. Identify different forest products and their uses.
- b. Explain various forest management practices. (Examples include prescribed burns, wild fires, clear cut, thinning, reforestation, etc)

**ACADEMIC STANDARDS:**

*S8CS2 – Students will use standard safety practices for all classroom laboratory and field investigations.*

*S8CS4 – Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.*

*S7L4 – Students will examine the dependence of organisms on one another and their environments*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P3 – Students will communicate mathematically.*

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 13 Lesson 7 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Identify products made from cellulose of trees (Twinkies, ice cream, shampoo, toothpaste, cosmetics, etc)
- Eye witness Tree Video
- Project Learning Tree: Activity #33 – Forest Consequences
- Project Learning Tree: Activity #50 – 400 Acre Wood

**MSAGED8-12: Students will be able to classify and list examples of trees specific to our region.**

- a) Identify the two types of trees. (Evergreen and Deciduous)
- b) Identify the major tree parts.
- c) Describe the physiological processes of tree growth.
- d) Identify Georgia's commercially important trees.



**ACADEMIC STANDARDS:**

*S7L1 – Students will investigate the diversity of living organisms and how they can be compared scientifically.*

*S7L3 – Students will recognize how biological traits are passed on to successive generations.*

*S7L4 – Students will examine the dependence of organisms on one another and their environments*

*S7L5 – Students will examine the evolution of living organisms through inherited characteristics that promote survival of organisms and the survival of successive generations of their offspring.*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P3 – Students will communicate mathematically.*

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 13 lesson 6 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Tree ID Notebook
- Scavenger Hunt
- Project Learning Tree: Activity #64 Looking at leaves
- Project Learning Tree: Activity #68 Name that Tree
- Georgia Forestry Commission Native Trees of GA books
- Oriental Trade Company Leaf Rubbing Plates (2 sets)

**MSAGED8-13: Students will explain the importance of conservation and preservation of natural resources.**

- a) Define conservation and preservation of natural resources.
- b) List methods of conservation and preservation of natural resources.
- c) Compare and contrast renewable and nonrenewable resources.

**ACADEMIC STANDARDS:**

*M8P1 – Students will solve problems (using appropriate technology).*

*M8D2 – Students will determine the number of outcomes related to a given event.*

*S8CS9 – Students will understand the features of the process of scientific inquiry.*

*S7L1 – Students will investigate the diversity of living organisms and how they can be compared scientifically.*

*S7L3 – Students will recognize how biological traits are passed on to successive generations.*

*S7L5 – Students will examine the evolution of living organisms through inherited characteristics that promote survival of organisms and the survival of successive generations of their offspring.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 14 lesson 2 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Georgia Middle School Ag Ed Curriculum Unit 14 lesson 3 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)
- Have students make a poster on different resources
- Have students make a wanted ad or poster on nonrenewable resources.
- Have a guest speaker come in from the NRCS.

**MSAGED8-14: Student will be able to describe wildlife and their habitat.**

- a) Identify local wildlife species and their relationship to the forest.
- b) Identify Georgia’s endangered wildlife species.

**ACADEMIC STANDARDS:**

*M8P1 – Students will solve problems (using appropriate technology).*

*M8D4 – Students will organize, interpret, and make inferences from statistical data.*

*S7L1 – Students will investigate the diversity of living organisms and how they can be compared scientifically.*

*S7L3 – Students will recognize how biological traits are passed on to successive generations.*

*S7L4 – Students will examine the dependence of organisms on one another and their environments*

*S7L5 – Students will examine the evolution of living organisms through inherited characteristics that promote survival of organisms and the survival of successive generations of their offspring.*

**SAMPLE TASKS:**

- Georgia Middle School Ag Ed Curriculum Unit 13 lesson 3 [www.aged.ces.uga.edu](http://www.aged.ces.uga.edu)

- Georgia Department of Natural Resource website
- Have students dissect fish and have a fish fry
- Have students construct their own state park
- GYOTAKU rubber fish rubs (Nasco – arts and crafts section)
- Wildlife tracks with plaster of Paris
- Make turkey calls out of film canisters
- Nasco animal rubbing plates

### **AGRISCIENCE PRE-PATHWAY:**

Upon completion of this unit students will be able to identify the role of agriscience in meeting human needs and identify current trends and issues relating to Agriscience. Students will also be able to demonstrate the application of agriscience in agricultural animal and plant research and production. Students will also identify various career clusters in the field of agriscience.

### **MSAGED8-15: The students will identify the role of agriscience in meeting human needs.**

- a) Define Agriscience and Biotechnology.
- b) Give examples of how agriscience meets basic human needs (food, clothing, shelter).
- c) Compare and contrast US and world agricultural practices.
- d) Discuss how the skills needed for agricultural work have evolved.

### **ACADEMIC STANDARDS:**

*S8CSI – Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.*

*S8CS6 – Students will communicate scientific ideas and activities clearly.*

*M8P1 – Students will solve problems (using appropriate technology).*

**SAMPLE TASKS:**

- Match raw products to finished products and graphically organize steps involved in completing the process.
- Look at Science Behind our Food. [Aged.ces.uga.edu](http://Aged.ces.uga.edu)

**MSAGED8-16: The student will identify current trends and issues relating to Agriscience.**

- a) Explain the role of agriscience and technology in society.
- b) Describe the role of technology in agriculture and identify major technological advances.
- c) Compare past agricultural methods to current production methods.
- d) Evaluate the use of the scientific method to supply the world with needed agricultural products.
- e) Identify issues associated with biotechnology.

**ACADEMIC STANDARDS:**

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

*M8P5 – Students will represent mathematics in multiple ways.*

*S8CS3 – Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.*

*S8CS6 – Students will communicate scientific ideas and activities clearly.*

**SAMPLE TASKS:**

- Have multiple planting mediums (clay, sand, potting soil, etc.) and plant bean seeds to hypothesize which will grow best under controlled conditions.
- Give students a historical agricultural production method and let them research or match it to the current replacement method (hand picked cotton in the past to modern machinery).

**MSAGED8-17: The student will demonstrate the application of agriscience in agricultural animal research and production.**

- a) Analyze how animal research has benefited the consumer.
- b) Explain how genetic characteristics are passed through generations.
- c) List products and byproducts that are derived from animals and their uses.
- d) Discuss current animal biotechnology research, practices, and issues.

**ACADEMIC STANDARDS:**

*M8D2 – Students will determine the number of outcomes related to a given event.*

*M8D3 – Students will use the basic laws of probability.*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

*M8P5 – Students will represent mathematics in multiple ways.*

*S8CS2 – Students will use standard safety practices for all classroom laboratory and field investigations.*

*S8CS4 – Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.*

*S8CS9 – Students will understand the features of the process of scientific inquiry.*

**SAMPLE TASKS:**

- Make beef jerky, cheese, butter, ice cream, etc.
- Discuss animal welfare and ethical treatment.
- Cloning Games / Technology; <http://www.sun-sentinel.com>

**MSAGED8-18: The student will demonstrate the application of agriscience in agricultural plant research and production.**

- a) Analyze how plant research has benefited the consumer.
- b) List products and byproducts that are derived from plants and their uses.
- c) Compares traditional plant breeding and genetic engineering of plants.
- d) Explain genetically modified organisms and their importance.

**ACADEMIC STANDARDS:**

*S8CS2 – Students will use standard safety practices for all classroom laboratory and field investigations.*

*S8CS4 – Students will use tools and instruments for observing, measuring, and manipulating equipment and materials in scientific activities utilizing safe laboratory procedures.*

*S8CS9 – Students will understand the features of the process of scientific inquiry.*

*M8D2 – Students will determine the number of outcomes related to a given event.*

*M8D3 – Students will use the basic laws of probability.*

*M8P1 – Students will solve problems (using appropriate technology).*

### **SAMPLE TASKS:**

- Make Mustard
- Make Peanut Butter
- Refer to Unit 17: Biotechnology
- Bill Nye’s “GMOs” video.
- Do a genetics experiment by obtaining 2 different colored bean seeds – one to represent male, one represent female. Discuss genetics pertaining to color of offspring. Put students in groups of 4 or 5. Give them a cup of 10 white beans and 10 red beans. Have them shake it up. Without looking, each student should draw out 2 bean seeds each to represent what color the offspring could possibly be. Use a Punnett square to chart offspring results.
- Isolate DNA lab

**MSAGED8-19: The student will identify various career clusters in the field of agriscience.**

- a) Production Agriculture
- b) Horticulture
- c) Forestry
- d) Ag Marketing and Business Management
- e) Rural Recreation and Natural Resources
- f) Ag Mechanics
- g) Ag Processing
- h) Ag Sales and Service

### **ACADEMIC STANDARDS:**

*S8CSI – Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.*

*M8P1 – Students will solve problems (using appropriate technology).*

*M8P4 – Students will make connections among mathematical ideas and to other disciplines.*

### **SAMPLE TASKS:**

- (6-8) Careers; <http://www.kids.gov/>
- Have a job shadow day- Groundhog Day is National Job Shadow Day.
- Host/attend career day.

### **READING STANDARD COMMENT:**

After the elementary years, students are seriously engaged in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal learning. Students encounter a variety of informational as well as fictional texts, and they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas *in context*.

Beginning with the middle grade years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

### **CTAEMRC-1: Students will enhance reading in all curriculum areas by:**

- a. Reading in all curriculum areas.

- Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
  - Read both informational and fictional texts in a variety of genres and modes of discourse.
  - Read technical texts related to various subject areas.
- b. Discussing books.
- Discuss messages and themes from books in all subject areas.
  - Respond to a variety of texts in multiple modes of discourse.
  - Relate messages and themes from one subject area to messages and themes in another area.
  - Evaluate the merit of texts in every subject discipline.
  - Examine author's purpose in writing.
  - Recognize the features of disciplinary texts.
- c. Building vocabulary knowledge.
- Demonstrate an understanding of contextual vocabulary in various subjects.
  - Use content vocabulary in writing and speaking.
  - Explore understanding of new words found in subject area texts.
- d. Establishing context.
- Explore life experiences related to subject area content.
  - Discuss in both writing and speaking how certain words are subject area related.
  - Determine strategies for finding content and contextual meaning for unknown words.

### **WRITING:**

The student writes clear, coherent text. The writing shows consideration of the audience and purpose. The student progresses through the stages of the writing process (e.g., prewriting, drafting, revising, and editing successive versions).

### **CTAEW-1: The student demonstrates competence in a variety of genres.**

The student produces technical writing (business correspondence: memoranda, emails, letters of inquiry, letters of complaint, instructions and procedures, lab reports, slide presentations) that:

- a) Creates or follows an organizing structure appropriate to purpose, audience, and context.
- b) Excludes extraneous and inappropriate information.
- c) Follows an organizational pattern appropriate to the type of composition.
- d) Applies rules of Standard English.

### **CTAEW-2: The student uses research and technology to support writing.**

The student:



- a) Identifies topics, asks and evaluates questions, and develops ideas leading to inquiry, investigation, and research.
- b) Uses organizational features of electronic text (e.g., bulletin boards, databases, keyword searches, e-mail addresses) to locate relevant information.
- c) Includes researched information in different types of products (e.g., compositions, multimedia presentations, graphic organizers, projects, etc.).
- d) Uses appropriate structures to ensure coherence (e.g., transition elements).
- e) Supports statements and claims with anecdotes, descriptions, facts and statistics, and specific examples.
- f) Gives credit for both quoted and paraphrased information in a bibliography by using a consistent and sanctioned format and methodology for citations.

**CTAEW-3: The student consistently uses the writing process to develop, revise, and evaluate writing.**

The student:

- a) Plans and drafts independently and resourcefully.
- b) Uses strategies of note taking, outlining, and summarizing to impose structure on composition drafts.
- c) Edits writing to improve word choice after checking the precision of the vocabulary.

**ENTREPRENEURSHIP:**

**MKT-EN-1: Understands concepts and processes associated with successful entrepreneurial performance.**

- a) Define entrepreneurship.
- b) Identify and analyze characteristics of a successful entrepreneur.
- c) Identify the reasons for planning in entrepreneurial businesses.
- d) Discuss the entrepreneurial discovery processes.
- e) Assess global trends and opportunities.
- f) Determine opportunities for business creation.
- g) Generate ideas for business.
- h) Determine feasibility of ideas.
- i) Determine the major reasons for business failure.

**ACADEMIC STANDARDS:**

*ELA8W1 – The student produces writing that establishes an appropriate organizational structure, sets a context and engages the reader, maintains a coherent focus throughout, and signals a satisfying closure.*

*ELA8W3 – The student uses research and technology to support writing.*

*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.*

*SSEIN1 – The student will explain why individuals, businesses and governments trade goods and services.*

**MKT-EN-2: Explain the fundamental concepts of business ownership.**

- a) Determine the relationship of competition to our private, free enterprise system.
- b) Explain the effects of competition on buyers and sellers.
- c) Identify the common types of business ownership.
- d) Compare and contrast the advantages and disadvantages of each type of ownership.
- e) Explain relevant government regulations relating to the operation of a business.
- f) Discuss the types of risks that businesses encounter.
- g) Explain how businesses deal with the various types of risks.
- h) Identify the market segment for the business.
- i) Formulate a marketing mix designed to reach a specific market segment.
- j) Utilize the marketing functions to determine the competitive advantage of the proposed business.

**ACADEMIC STANDARDS:**

*ELA8W1 – The student produces writing that establishes an appropriate organizational structure, sets a context and engages the reader, maintains a coherent focus throughout, and signals a satisfying closure.*

*ELA8W3 – The student uses research and technology to support writing.*

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

**CTAE FOUNDATION SKILLS:**

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U.S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by

a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

**CTAE-FS-1 Technical Skills:** Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

**CTAE-FS-2 Academic Foundations:** Learners achieve state academic standards at or above grade level.

**CTAE-FS-3 Communications:** Learners use various communication skills in expressing and interpreting information.

**CTAE-FS-4 Problem Solving and Critical Thinking:** Learners define and solve problems, and use problem-solving and improvement methods and tools.

**CTAE-FS-5 Information Technology Applications:** Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

**CTAE-FS-6 Systems:** Learners understand a variety of organizational structures and functions.

**CTAE-FS-7 Safety, Health and Environment:** Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

**CTAE-FS-8 Leadership and Teamwork:** Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

**CTAE-FS-9 Ethics and Legal Responsibilities:** Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

**CTAE-FS-10 Career Development:** Learners plan and manage academic-career plans and employment relations.

**CTAE-FS-11 Entrepreneurship:** Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.