Agriculture

PROGRAM CONCENTRATION: Agriculture
COURSE TITLE: Exploring Agriculture Education (Sixth Grade)

COURSE DESCRIPTION:

Exploring Agricultural Education analyzes the different aspects of the agricultural industry. This course is designed to give students a general understanding of the importance of the agricultural industry.

Upon completion of this course 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.

CRITICAL COMPONENTS:

MSAGED6-1: Students will demonstrate the importance of agriculture in daily life.

a) Describe and explain the impact of agriculture on daily life.
b) Describe and demonstrate safe operation of agricultural lab equipment.
c) Identify the sources of different types of food and fiber.

ACADEMIC STANDARDS:

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

SAMPLE TASKS:

- Have students make a list of all the agriculture related products they use on a daily basis.
- Dissect a pizza and list all the ingredients used to make the pizza and their origin.

MSAGED6-2: Students will express an understanding of the history of American agriculture.

a) Specify and explain the role of agriculture in the formation of the US.

b) Specify and explain the changes in agriculture over the last 200 years.
c) Analyze the impact of technological advancement in agriculture.

ACADEMIC STANDARDS:

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

SAMPLE TASKS:

- Interactive website: www.agclassroom.org/gan/multimedia.htm
- "American Agriculture – Growing a Nation"
- Make a timeline of historical agriculture events
- Give each student a different date, have student research what historical agriculture event happened on that date, create a paper size poster about the event, the entire class makes a timeline on the wall with their posters.

MSAGED6-3: Students will state the importance of Georgia agriculture.

a) Summarize the importance of agriculture to Georgia's economy.
b) Identify the top ten agricultural commodities and economic value.

ACADEMIC STANDARDS:

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

SAMPLE TASKS:

- Show PowerPoint GA Ag Facts 2004 by J. Taylor from www.gaaged.org and chart the rankings
- Research GA's top commodities

MSAGED6-4: Establish an understanding of Agricultural Education Programs.

a) Name the three parts of the agricultural program.
b) Explain the history, mission, and benefits of the FFA.
c) Describe examples of a Supervised Agricultural Experience Program.

d) Select a Supervised Agricultural Experience Program based on career goals and industry needs for each individual.

ACADEMIC STANDARDS:

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

M6P4 – Students will make connections among mathematical ideas and to other disciplines.

SAMPLE TASKS:

- FFA Timeline
- Creed Speaking contest
- Have a state officer visit
- Hold a mock contest of a career development event
- Practice opening ceremony with your class

MSAGED6-5: Express knowledge of the area of horticulture.

a) Define Horticulture.
b) Compare / contrast the horticulture and agriculture industry.
c) Identify the four areas of the horticulture industry: Floriculture, Olericulture, Nursery/Landscape, Pomology

ACADEMIC STANDARDS:

M6D2 – Students will use experimental and simple theoretical probability and will understand the nature of sampling. They will also make predictions from investigations.

M6M2 – Students will use appropriate units of measure for finding length, perimeter, area, and volume and will express each quantity using the appropriate unit.

SAMPLE TASKS:

- Tour the school grounds and identify plant material.
- Have a guest speaker come in.
- Hold a mock floriculture or nursery/ landscape contest

MSAGED6-6: Demonstrate an understanding of the area of animal science.

a) Identify and explain the role of large animals in agriculture.
b) Identify and explain the species of small and companion animals.
c) Identify and explain the function of exotic animal species.
d) Specify and explain the importance and impact of animal health.

ACADEMIC STANDARDS:

M6P4 – Students will make connections among mathematical ideas and to other disciplines.

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

SAMPLE TASKS:

- Make beef jerky
- Ear notch construction paper pig
- Play animal terminology bingo or jeopardy

MSAGED6-7: Describe examples of careers clusters in agriculture.

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:

M6P4 – Students will make connections among mathematical ideas and to other disciplines.

SAMPLE TASKS:

- Hold a career fair
- Business/ Industry tour
- Research a career and give a report

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.