

Unit 3: CDE'S (Career Development Events)

Content Area: **CTE**
Course(s): **Horticulture IV**
Time Period: **September**
Length: **All Year**
Status: **Published**

Unit Overview

Career development events (CDEs) allow FFA members to exhibit their skills in areas that are part of classroom instruction in agricultural education. A. CDEs begin at the chapter level. Participants may advance to the national level. B. Students develop skills in classes related to careers in the agriculture industry. C. Team CDEs evaluate skills in the following areas at the national level: 1. Ag Communications 2. Ag Issues 3. Ag Mechanics 4. Ag Sales 5. Agronomy 6. Dairy Cattle 7. Dairy Handlers Activity 8. Dairy Foods 9. Environmental and Natural Resources 10. Farm Business Management 11. Floriculture 12. Food Science and Technology 13. Forestry 14. Horse Evaluation 15. Livestock Evaluation 16. Marketing Plan 17. Meat Evaluation and Technology 18. Nursery and Landscape 19. Parliamentary Procedure 20. Poultry Evaluation and Selection

Enduring Understandings

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Career Education Connection

TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
TECH.9.4.12.CT.1	Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).

Essential Questions

- Anticipated Pro What are the various FFA proficiency awards available to FFA members?
- What are the four FFA degree areas?
- What career development events (CDEs) are available for FFA members to participate in?

Standards/Indicators/Student Learning Objectives(SLO'S):

- 10. English Language Arts
- 10.7.12. History/Social Studies: 9-12
- 10.7.12.SS12. History/SS: Grades 11-12
- 10.7.12.SS12.2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
- 9.4.12.A.34, 10.7.12.SS12.2

CAEP.9.2.12.C	Career Preparation
CAEP.9.2.12.C.1	Review career goals and determine steps necessary for attainment.
CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
CAEP.9.2.12.C.4	Analyze how economic conditions and societal changes influence employment trends and future education.
CAEP.9.2.12.C.5	Research career opportunities in the United States and abroad that require knowledge of world languages and diverse cultures.
CAEP.9.2.12.C.6	Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business.
CAEP.9.2.12.C.9	Analyze the correlation between personal and financial behavior and employability.

Lesson Titles

- Entrepreneurship
- Sole Proprietorships
- Achievement in FFA
- Agribusiness Career Opportunities
- Corporations
- Determining the Types of Agribusinesses
- Establishing an Agribusiness
- Financial Management in a Horticultural Business
- Partnerships
- The Scope and Importance of Agribusiness

Career Readiness, Life Literacies, & Key Skills

9.3.12.AG	Agriculture, Food & Natural Resources
9.3.12.AG-BIZ	Agribusiness Systems
9.3.12.AG-BIZ.1	Apply management planning principles in AFNR businesses.
9.3.12.AG-BIZ.4	Develop a business plan for an AFNR business.
9.3.12.AG-BIZ.5	Use sales and marketing principles to accomplish AFNR business objectives.
9.3.12.AG-ENV	Environmental Service Systems
9.3.12.AG-FD.3	Select and process food products for storage, distribution and consumption.

9.3.12.AG-FD.4	Explain the scope of the food industry and the historical and current developments of food products and processing.
9.3.12.AG-PST.2	Operate and maintain AFNR mechanical equipment and power systems.
9.3.12.AG-PST.3	Service and repair AFNR mechanical equipment and power systems.
9.3.12.AG-PST.4	Plan, build and maintain AFNR structures.
9.3.12.AG-PST.5	Use control, monitoring, geospatial and other technologies in AFNR power, structural and technical systems.
9.3.12.AG-BIZ.2	Use record keeping to accomplish AFNR business objectives, manage budgets and comply with laws and regulations.
9.3.12.AG-BIZ.3	Manage cash budgets, credit budgets and credit for an AFNR business using generally accepted accounting principles.

Instructional Strategies/Learning Activities

- Cooperative Learning
- FFA- Ag Explorer and AET
- quizlet
- SAE'S
- Students will work independantly and in Teams to prepare for appropriate CDE projects
- Team Demonstrations

Summative Assessment

- CDE Results
- FFA Convention Results
- Program of Activities Results

Benchmark Assessments

- Skills Based Assessments
- Reading Response
- Writing Prompt
- Lab Practical

Alternative Assessments

Performance tasks

Project-based assignments

Problem-based assignments

Presentations

Reflective pieces
Concept maps
Case-based scenarios
Portfolios

Formative Assessment

- CDE'S
- Digital Portfolio
- Group Discussion
- Guided Practice
- Teacher Observation

Inter-Disiplinary Connections:

- 10. English Language Arts
- 10.3.12. Reading: Informational Text: 9-12
- 10.3.12.IT 12. Informational Text: Key Ideas and Details 11-12
- 10.3.12.IT 12.10a. By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.

Diverseity, Equity, and Inclusion

Asian American Pacific Islander Mandate

Asian Influence on Horticulture

Asian cultures have had a profound impact on global horticulture, shaping gardening practices, landscape design, and our understanding of plants. Here are some key contributions:

Traditional Asian Gardening Practices

- **Zen Gardens:** Originating in Japan, Zen gardens emphasize minimalism, simplicity, and harmony with nature. They often feature carefully raked gravel patterns, rocks, and moss.
- **Bonsai:** A Japanese art form that involves cultivating miniature trees in containers. Bonsai techniques have influenced the cultivation of ornamental plants worldwide.
- **Chinese Gardens:** Characterized by their emphasis on natural beauty, Chinese gardens often

incorporate water features, winding paths, and intricate rock formations.

Asian Crops and Horticulture Techniques

- **Introduction of New Crops:** Asian cultures have introduced numerous crops to the Western world, including rice, soybeans, tea, various fruits (like citrus and persimmons), and vegetables (like bok choy and eggplant).
- **Hydroponics and Vertical Farming:** Asian countries, particularly in densely populated urban areas, have pioneered advanced farming techniques like hydroponics and vertical farming to maximize food production in limited space.

Modern Horticulture Businesses

In recent decades, Asian businesses have played a significant role in the global horticulture industry. They are involved in various aspects, including:

- **Nursery and Greenhouse Operations:** Asian countries have large-scale nursery and greenhouse operations, producing a wide range of ornamental plants and cut flowers for both domestic and international markets.
- **Agricultural Technology:** Asian companies are at the forefront of agricultural technology, developing innovative solutions for crop production, such as precision agriculture, automated irrigation systems, and advanced plant growth systems.
- **Horticultural Exports:** Many Asian countries are major exporters of fresh produce, cut flowers, and ornamental plants. They have developed efficient supply chains and logistics systems to ensure the timely delivery of high-quality products to global markets.

By embracing traditional wisdom and adopting cutting-edge technology, Asian businesses continue to shape the future of horticulture.

Climate Change

LGBTQ and Disabilities Mandate

Holocaust Mandate

Amistad Mandate

Modifications

- Be flexible with time frames and deadlines
- Focus on domain specific vocabulary and keywords
- Group students
- Provide formal and informal verbal interaction to provide practice, increase motivation, and self-monitoring
- Repeat, reword, clarify

At Risk Modifications

- Additional time for assignments
- Adjusted assignment timelines
- Agenda book and checklists
- Answers to be dictated
- Assistance in maintaining uncluttered space
- Books on tape
- Concrete examples
- Extra visual and verbal cues and prompts
- Follow a routine/schedule
- Graphic organizers
- Have students restate information
- No penalty for spelling errors or sloppy handwriting
- Peer or scribe note-taking
- Personalized examples
- Preferential seating
- Provision of notes or outlines
- Reduction of distractions
- Review of directions
- Review sessions
- Space for movement or breaks
- Support auditory presentations with visuals
- Teach time management skills
- Use of a study carrel
- Use of mnemonics
- Varied reinforcement procedures
- Work in progress check

ELL Modifications:

- Choice of test format (multiple-choice, essay, true-false)
- Continue practicing vocabulary
- Provide study guides prior to tests
- Read directions to the student
- Read test passages aloud (for comprehension assessment)
- Vary test formats

IEP & 504 Modifications

- Allow for redos/retakes
- Assign fewer problems at one time (e.g., assign only odds or evens)
- Differentiated center-based small group instruction
- Extra time on assessments
- Highlight key directions
- If a manipulative is used during instruction, allow its use on a test
- Opportunities for cooperative partner work
- Provide reteach pages if necessary
- Provide several ways to solve a problem if possible
- Provide visual aids and anchor charts
- Test in alternative site
- Tiered lessons and assignments
- Use of a graphic organizer
- Use of concrete materials and objects (manipulatives)
- Use of word processor

G&T Modifications:

- Alternate assignments/enrichment assignments
- Enrichment projects
- Extension activities
- Higher-level cooperative learning activities
- Pairing direct instruction with coaching to promote self-directed learning
- Provide higher-order questioning and discussion opportunities
- Provide texts at a higher reading level
- Tiered assignments

- Tiered centers

Materials

Texts at Various Levels

- Introductory Horticulture Textbook
- Various Gardening, Plant Care, Soil and horticulture books

Supplemental Materials

- Edpuzzle
- Internet
- Live video streaming
- Various literature regarding planting and vegetation.

Core Instructional Materials

- AET web program from FFA
- Ag Explorer web program from FFA
- Mycaert: A Web-Based System Allowing Teachers to Plan, Document, Deliver, and Assess Standards-Based Instruction.
- National FFA Organization Teacher Resources toolbox FFA.org. Agricultural education prepares students for successful careers and a lifetime of informed choices in the global agriculture, food, fiber and natural resources systems.
- Quizlet

Technology

- Google Classroom
- Google Slides
- Pro-landscape Software
- Quizlet.com

TECH.8.1.12

Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

TECH.8.1.12.A

Technology Operations and Concepts: Students demonstrate a sound understanding of

	technology concepts, systems and operations.
TECH.8.1.12.A.CS1	Understand and use technology systems.
TECH.8.1.12.A.CS2	Select and use applications effectively and productively.
TECH.8.1.12.B	Creativity and Innovation: Students demonstrate creative thinking, construct knowledge and develop innovative products and process using technology.
TECH.8.1.12.B.CS1	Apply existing knowledge to generate new ideas, products, or processes.
TECH.8.1.12.B.CS2	Create original works as a means of personal or group expression.
TECH.8.1.12.C.1	Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
TECH.8.1.12.C.CS1	Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.
TECH.8.1.12.C.CS3	Develop cultural understanding and global awareness by engaging with learners of other cultures.
TECH.8.1.12.D	Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
TECH.8.1.12.D.3	Compare and contrast policies on filtering and censorship both locally and globally.
TECH.8.1.12.D.CS2	Demonstrate personal responsibility for lifelong learning.
TECH.8.1.12.D.CS3	Exhibit leadership for digital citizenship.
TECH.8.1.12.E	Research and Information Fluency: Students apply digital tools to gather, evaluate, and use information.
TECH.8.1.12.E.CS1	Plan strategies to guide inquiry.
TECH.8.1.12.F.CS1	Identify and define authentic problems and significant questions for investigation.
TECH.8.1.12.F.CS2	Plan and manage activities to develop a solution or complete a project.
TECH.8.1.12.F.CS3	Collect and analyze data to identify solutions and/or make informed decisions.
TECH.8.1.12.F.CS4	Use multiple processes and diverse perspectives to explore alternative solutions.
TECH.8.2.12.C.5	Create scaled engineering drawings of products both manually and digitally with materials and measurements labeled.
TECH.8.2.12.D.3	Determine and use the appropriate resources (e.g., CNC (Computer Numerical Control) equipment, 3D printers, CAD software) in the design, development and creation of a technological product or system.
TECH.8.2.12.D.CS1	Apply the design process.