

Agriculture, Food & Natural Resources Career Cluster
Agricultural Animal Production and Management
Course Number 01.43200

Course Description:

The goal of this course is to provide all students instruction in establishing and managing agricultural animal enterprises; includes instruction in selecting, breeding, feeding, caring for and marketing beef and dairy cattle, horses, swine, sheep, and poultry. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Course Standard 1**AFNR-AAPM-1**

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.

The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions
				Obtaining Feedback
				Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths

Georgia Department of Education

Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used		Using Employment Agencies
	Strategies for Customer Service			Landing an Internship
				Staying Motivated to Search

1.4 Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	

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Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses. Additional Common Core ELA/Literacy standards for Speaking and Listening are listed in the foundational course standards below.

Course Standard 2

AFNR-AAPM-2

Learn to work safely in the agriculture lab and work sites, demonstrate selected competencies in leadership through the FFA and agricultural industry organizations, and develop plans for a Supervised Agricultural Experience Program (SAEP).

2.1 Explain the role of the Agricultural Education program and the FFA in personal development.

- 2.2 Demonstrate knowledge learned through a SAEP.
- 2.3 Develop leadership and personal development skills through participation in the FFA.
- 2.4 Explore career opportunities in animal science through the FFA and Agricultural Education Program.
- 2.5 Explore the professional agricultural organizations associated with the course content.

Course Standard 3

AFNR-AAPM-3

Demonstrate knowledge and importance of the livestock industry to the United States.

- 3.1 Explain how domestication of farm animals occurred throughout history.
- 3.2 Examine the function of livestock by analyzing and discussing uses and purposes of livestock in modern society.
- 3.3 Describe the size of the livestock industry in the United States by interpreting graphs, charts, or data.
- 3.4 Illustrate the scope and distribution of livestock species within the state of Georgia.

Course Standard 4

AFNR-AAPM-4

Demonstrate an understanding of career opportunities in livestock production and management.

- 4.1 Demonstrate an understanding of career opportunities in livestock production and management.
- 4.2 Explain the value of an agricultural background for an individual entering a livestock-related occupation.
- 4.3 List and explain employment opportunities that require knowledge and skills about animal science.
- 4.4 Analyze skills, education requirements, income, and advantages and disadvantages of careers in the livestock industry.
- 4.5 Identify trends in animal production and explain how these could affect job opportunities.
- 4.6 Demonstrate personal and job skills for success in entering and advancing in a career in the animal industry.

Course Standard 5

AFNR-AAPM-5

Examine the relationship of livestock to the environment, and assess the impact of livestock production on the environment.

- 5.1 Describe livestock production problems relating to the environment.
- 5.2 Describe methods of handling livestock wastes which reduce environmental pollution within the guidelines of current laws and regulations.
- 5.3 Determine the proper way to dispose of dead animals from livestock production operations.
- 5.4 Construct a plan to utilize Best Management Practices (BMPs) on a livestock operation using state or federal BMP guidelines.

Course Standard 6

AFNR-AAPM-6

Examine ethical issues related to animal agriculture and demonstrate an understanding of ethics in livestock production.

- 6.1 Describe the role of livestock in conjunction with food supply and food-animal regulations.
- 6.2 Justifies the production of livestock and exhibition of animals with relation to animal welfare.

- 6.3 Explain importance of public perception in terms of the correlation between consumer concerns for food safety and producer marketing concerns.

Course Standard 7

AFNR-AAPM-7

Demonstrate an understanding of livestock safety and Bio-security of food supplies.

- 7.1 Describe the importance of Bio-security in terms of livestock production and food supply.
- 7.2 Examine Bio-security methods and practices within livestock production facilities.
- 7.3 Discuss procedures at the local, state and national levels to ensure biosecurity of the animal industry.
- 7.4 Design a biosecurity plan for an animal production operation.

Course Standard 8

AFNR-AAPM-8

Recognize the importance of bioterrorism threats to the livestock industry.

- 8.1 Define bioterrorism in the livestock industry.
- 8.2 Examine bioterrorism threats and livestock producers concerns.
- 8.3 Formulate a plan to prevent bioterrorism on a livestock operation utilizing information from federal and state security agencies.

Course Standard 9

AFNR-AAPM-9

Classify farm animals as ruminants and non-ruminants and determine their feeding requirements.

- 9.1 Classify farm animals as ruminant or non-ruminant and describe the functions of the parts of the digestive systems of ruminant and non-ruminant animals.
- 9.2 Describe the major function and characteristics of the basic nutrient groups.
- 9.3 Discuss the general use and purpose of feed additives and implants.
- 9.4 Classify feeds as roughages or concentrates.
- 9.5 Balance a feed ration for a specific type of livestock and formulate a feeding program.
- 9.6 Explain the characteristics and functions of a balanced ration.
- 9.7 Compare and contrast common types of feedstuffs and the roles they play in the diets of animals.
- 9.8 Select appropriate feedstuffs for animals based on factors such as economics, digestive system, and nutritional needs.

Course Standard 10

AFNR-AAPM-10

Identify and describe the breeds of beef cattle and determine required feeding and production management practices.

- 10.1 Identify the various breeds of beef cattle of commercial importance based on origin and breed characteristics.
- 10.2 Determine the function of beef animals and the production systems in which they are produced.
- 10.3 Select breeding animals by interpreting performance data.
- 10.4 Identify the parts of the beef animal and use in phenotypic evaluation.
- 10.5 Identify common roughages and concentrates used in cattle rations.
- 10.6 Describe and/or demonstrate common management practices such as castration, dehorning, vaccination and identification of animals.
- 10.7 Examine the advantages and disadvantages of using various breeding systems.

- 10.8 Explain total herd health and its use in the beef herd related to prevention and treatment of parasites, diseases and nutritional disorders.
- 10.9 Describe the facilities and equipment required for beef operations.
- 10.10 Describe the various methods of marketing beef cattle.
- 10.11 Explain the process, benefits and limitations of artificial insemination as compared to natural mating.

Course Standard 11

AFNR-AAPM-11

Identify and describe the breeds of swine and determine required feeding and production management practices.

- 11.1 Identify the various breeds of swine based on origin and breed characteristics
- 11.2 Determine the function of swine and the production systems in which they are produced.
- 11.3 Interpret swine performance records in selecting breeding animals.
- 11.4 Name parts of the live hog and wholesale cuts of the carcass.
- 11.5 Evaluate swine based on performance data and phenotypic conformation.
- 11.6 Identify common roughages and concentrations used in swine rations.
- 11.7 Demonstrate an understanding of common management practices such as castration, vaccination and identification of animals.
- 11.8 Explain the effects, advantages, and disadvantages of using various breeding systems.
- 11.9 Explain total herd health and its use in the swine herd related to prevention and treatment in parasites, disease, and nutrition disorders.
- 11.10 Describe the facilities and equipment required for swine operations.
- 11.11 Describe the various methods of marketing swine.
- 11.12 Explain the benefits and limitations of artificial insemination as compared to natural mating.

Course Standard 12

AFNR-AAPM-12

Identify and describe the breeds of sheep and goats and determine required feeding and production management practices.

- 12.1 Identify the various breeds of sheep and goat based on origin and breed characteristics.
- 12.2 Determine the function of sheep and goat and describe the production systems in which they are produced.
- 12.3 Interpret sheep and goat performance records in selecting breeding animals.
- 12.4 Name parts of the sheep and goats and use in evaluation and selection.
- 12.5 Identify common roughages and concentrations used in sheep and goat rations.
- 12.6 Demonstrate an understanding of common management practices such as castration, dehorning, vaccination and identification of animals.
- 12.7 Explain total flock/ herd health and its use in the sheep or goat herd related to prevention and treatment in parasites, disease, and nutrition disorders.
- 12.8 Describe the various methods of marketing sheep and goats.
- 12.9 Describe the facilities and equipment required for sheep and goat operations.
- 12.10 Discuss the benefits and limitations of artificial insemination as compared to natural mating.

Course Standard 13

AFNR-AAPM-13

Identify and describe the breeds of horses and determine required feeding, production management practices, and uses of horses.

- 13.1 Identify the various breeds of horses based on origin and breed characteristics.

- 13.2 Discuss the functions of horses and their production.
- 13.3 Explain the benefits and limitations of artificial insemination as compared to natural breeding systems.
- 13.4 Name the parts of the horse and identify the procedure for evaluating and selecting horses.
- 13.5 Identify common roughages and concentrations used in horse rations.
- 13.6 Demonstrate an understanding of common management practices for horses such as castration, vaccination, identification, breeding practices and hoof care.
- 13.7 Describe the facilities and equipment required for horse operations.
- 13.8 Explain the effects, advantages, and disadvantages of using various breeding systems.
- 13.9 Explain total herd health and its use in the horse herd related to prevention and treatment in parasites, disease, and nutrition disorders.
- 13.10 Describe the various methods of marketing horses.

Course Standard 14

AFNR-AAPM-14

Demonstrate an understanding of the poultry industry business structure, management practices, processing procedure, and identify the equipment required for this industry.

- 14.1 Describe the development of the modern poultry industry in the United States.
- 14.2 Demonstrate knowledge of the selection of poultry for production.
- 14.3 Identify and grade parts of the poultry carcass.
- 14.4 Describe the feeding practices and nutritional needs for poultry.
- 14.5 Demonstrate an understanding of common management practices of poultry.
- 14.6 Describe housing and equipment used in the poultry industry.
- 14.7 Explain the prevention and treatment of parasites, diseases and nutritional disorders in poultry.
- 14.8 Describe the parts of an egg and demonstrate proper technique when candling and grading eggs.
- 14.9 Identify and describe the specific cuts of the poultry carcass.

Course Standard 15

AFNR-AAPM-15

Identify the dairy cattle breeds and determine required feeding, production management practices, and uses of dairy products.

- 15.1 Identify breeds of dairy cows and discuss their characteristics.
- 15.2 Identify uses of dairy products.
- 15.3 Recognize differences in milk classifying and grading.
- 15.4 Describe linear evaluation traits and improvements through genetics.
- 15.5 Identify beneficial characteristics in evaluation and selection.
- 15.6 Explain the effect of artificial insemination and embryo transfer on dairy production.
- 15.7 Discuss proper feeding principles and appropriate feeds and forages for dairy animals in order to maintain production.