

ITAWAMBA COMMUNITY COLLEGE
AGR 1214 – Animal Science
Fall 2020 Syllabus

Course Description: An introductory course providing students with an overview of the basic biological principles, scientific relationships, and management practices related to livestock production. The course will provide instruction in reproduction, genetics, nutrition, lactation, and management of beef cattle, dairy cattle, horses, sheep, goats, swine, and poultry.

Credit Hours: Four semester hours

Textbook: Taylor, R.E. and T.G. Field. 2020. Scientific Farm Animal Production. (Twelfth edition). Pearson Education Inc, Hoboken, N.J. ISBN: 978-0-13-518767-8.

Ebook: Accessible from the RedShelf Course Materials icon found in the navigation pane.

Instructor: Lance D Stewart

Online Hours: Monday – Friday: 5:00 – 7:30

E-mail: ldstewart@iccms.edu

Assignment	Point Value	Total Points	Percentage of Final Grade
Module Writing Assignments (12)	10	120	6%
Module Lecture Quizzes (12)	50	600	28%
Module Lab Quizzes (12)	25	300	14%
Proctored Mid-Term Exam (1)	505	505	24%
Final Exam (1)	600	600	28%
Total (38)		2,125	100%

Grading Scale

Letter Grade	Minimum Points Required for Letter Grade	Percentage of Total Points
A	1,912-2,125	90% – 100%
B	1,700-1,911	80% - 89%
C	1,487-1,699	70% - 79%
D	1,275-1,486	60% - 69%
F	0000-1,274	0% - 59%

Instructional Techniques

Weekly module assignments of textbook reading, watching, and listening to online video, and discussion of material from assignments.

The Mid-Term Exam will only be given at an ICC testing facility or at a certified proctored site. Please schedule your sitting as soon as possible and stay aware of college and course announcements as this requirement is subject to change due to the Covid-19 pandemic of 2020.

The Final Exam will be made available for you to take online from anywhere. It will be a non-proctored exam but will be timed.

Course Calendar and Due Dates

All course due dates is posted in the course Calendar. Always use the course Calendar in Modules, and do not rely on the Canvas app calendar or To Do List.

Module Lecture Quizzes

Each week you will be required to complete a module lecture quiz on the material covered that week. Each lecture quiz is worth a total of 50 points. The lecture quiz questions will be True or False, Matching, or Short Answer. Links to access each quiz can be found at the bottom of each module overview.

Module Lab Quizzes

Each week you will be required to complete a module lab quiz on the material covered in that week. These lab quizzes will contain a differing number of questions, but each of these quizzes will be worth 25 points. The lab quiz questions will be True or False, Matching, or Short Answer. Links to access each quiz can be found at the bottom of each module overview.

Writing Assignments

Each week you will be required to complete a module writing assignment. These assignments will be 1 or 2 open ended questions relevant to the material covered that week. Each of these writing assignments is worth 10 points. Links to access each writing assignment can be found at the bottom of each module overview.

Late Assignments

Yes, you may turn in late assignments but turning in the assignment early is always preferred. However, each day your assignment is late, you lose a letter grade. If you have extenuating circumstances, reach out to me and we will discuss your situation.

Attendance Policy

Presence in the online classroom is determined by submitting assignments, you must complete at least **one** of the module assignments each week to be counted present. If you do not complete at least **one** module assignment, you will be counted absent for that week. Students will be automatically dropped once they accumulate their third absence.

Withdrawal Policy

1. Should withdrawal become necessary, **the student is responsible** for completing the paperwork to initiate the withdrawal process.
2. Until you receive an MSVCC confirmation email for withdrawal, you are enrolled in the class. A student will receive a W grade, if withdrawal officially occurs by the date of the last allowable absence.
3. If the student fails to initiate the paperwork before the last allowable absence, he/she **will** receive the grade based upon the coursework completed.

Class Reinstatement

1. If you have been dropped from this course due to excessive absences and you want to continue in the course, you must seek reinstatement.

2. To begin this process, you must contact your instructor with this request.
3. Your instructor must forward the request with your attendance records to the Dean of Distance Learning Instruction for Itawamba Community College.

Academic Honesty Policy

Itawamba Community College is committed to academic honesty and scholarly integrity. Cheating and plagiarism erode the educational and social values of the College and deprive students of knowledge, skills and character traits valued in the community.

Cheating is the act of deception by which a student misleadingly demonstrates that he/she has mastered information or skills on an academic exercise. Cheating includes, but is not necessarily limited to:

- submitting work that is not the student's own, including papers, assignments or exams
- supplying or receiving in any way unauthorized information for the preparation of a test, exam, or assignment
- communicating during a text/exam with the intent of copying from or supply information to another student
- taking a test/exam with the aid of cheat sheets, notes, or other unauthorized assistance
- improperly using technology including copying or receiving information from others, accessing computer files without authority, and altering records
- assisting any person committing an act of academic dishonesty.

Plagiarism is the representation of previously written, published or creative work as one's own. Examples include, but are not limited to:

- representing any scholarly work of others, such as musical compositions, computer programs, visual arts, as one's own
- offering as one's own work the words, ideas, or arguments of other persons without appropriate credit
- falsifying bibliographies.

First Offense: The student will receive a "0" for the assignment, test, project, etc. The student may not drop this grade.

Second Offense: The student will receive an "F" for the course.

Third Offense: The student will be suspended from the college for two calendar years.

Electronic Policy

Only authorized electronic devices are allowed in the classroom

Gender-Based Misconduct

Itawamba Community College is committed to providing an environment free from gender-based discrimination and misconduct. Itawamba Community College will not tolerate gender-based misconduct of any kind. For more information please visit <http://www.iccms.edu/Portals/0/docs/publications/studentguide.pdf>

On-Campus Services

The College will provide options for interim and ongoing support to students who have experienced any form of gender-based misconduct. These options include, but are not limited to, changes in residential assignments, classroom or employment, no-contact orders and/or academic support. These services may be accessed through the following offices:

- Director of Student Affairs, Student Support Center, Tupelo/Belden, 662.620.5302
- Director of Housing, David C. Cole Student Services Building, Fulton, 662.862.8232
- Vice President of Student Services/Title IX Coordinator, David C. Cole Student Services Building, Fulton, Tupelo/Fulton/Belden, 662.862.8271

Campus Police

- Fulton Campus Police, Student Activities Center, 662.862.8300 or 662.687.2750
- Tupelo Campus Police, Student Services Building, 662.620.5300 or 662.687.2751
- Belden Center Police, Belden Center, 662.407.1570 or 662.687.2752

Off-Campus Services

Additional services such as counseling and medical exams may be accessed off-campus. Referrals may be made by the above-listed offices. If a student wishes for his/her identity and details of the incident be kept confidential, off-campus victims' services and medical services providers can maintain confidentiality.

SAFE (24-hour/confidential) 1.800.527.7233

North Mississippi Medical Center (Tupelo) 662.377.3000

Fulton Medical Clinic 662.862.5200

If there is an emergency or to seek criminal remedy, contact

Fulton Police Department 662.862.2299

Itawamba County Sheriff's Office 662.862.5575

Tupelo Police Department 662.841.6491

Lee County Sheriff's Office 662.841.9040

For more information on gender-based misconduct, see [Board Policy JCA-R](#)

Student Conduct for the Classroom

Students who register at Itawamba Community College agree to conform to its regulations and policies and are subject to disciplinary action upon violation of these regulations and policies. Any student found to have committed the following misconduct is subject to the disciplinary action as outlined in the *Student Guide*.

Misconduct includes, but is not limited to:

- Obstruction or disruptions of teaching, research administrations, public service functions, the flow of vehicular or pedestrian traffic or other college activities.
- Physical assault, abuse or detention of any person, or conduct which endangers the health or safety of any person.
- Theft of or damage to property of the College or property of a member of the college community or a visitor to the College.
- Abusive or profane language or public displays of affection not in keeping with good taste and high moral standards.
- Violations of established college policies and regulations.
- Violations of residence hall rules and regulations.
- Harassment, intimidation or bribery of any student, faculty or staff. Harassment is

considered to be words, behaviors and/or actions which intentionally inflict serious mental or emotional distress on others and/or disrespectful in nature that are directed toward college officials.

- Only authorized electronic devices are allowed in the classroom.

For a full listing of the Code of Student Conduct, visit the following link and view pages 13-22 of the *Student Guide*: <http://www.iccms.edu/Portals/0/docs/publications/studentguide.pdf>

Student Success Centers and Writing Centers

The Student Success Centers provide comprehensive programs and services designed to empower students and to connect them with the resource needed to achieve both academic and personal goals. Free tutoring services are available. The Writing Centers offer free, friendly, one-on-one writing consultants for all ICC Students.

Locations:

Fulton Campus, Technical Education Building, phone: 662.862.8259

Tupelo Campus, Student Support Center, phone: 662.620.5022

Supportive Services

Itawamba Community College's Office of Supportive Services provides services to individuals who are members of special populations. Under the Carl D Perkins Vocational and Technical Education Act of 1998, special populations include

- Individuals with disabilities;
- Individuals from economically disadvantaged families, including foster children;
- Individuals preparing for nontraditional training and employment;
- Single parents (teens and adults), including single pregnant females;
- Displaced homemakers; and
- Individuals with barriers to educational achievement, including individuals with limited English proficiency.

The Office of Supportive Services coordinators serve as liaisons between instructors, students and school officials; facilitate student learning and assist students with the transition from school to work.

Americans with Disabilities Act

In accordance with section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA), a student with a documented disability may apply to the Office of Supportive and Disability Services for accommodations. The OSDA on the Tupelo campus is located in the Purvis Center, and the telephone numbers are (662)620-5136 or (662)620-5303. On the Fulton campus, the OSDS is located in the Business Administration Building, and the telephone number is (662)862-8173.

Tobacco-Free Policy Statement

In order to promote a healthy environment for students, faculty, staff and visitors, Itawamba Community College will become tobacco-free on all campuses, effective January 1, 2011. The use of tobacco and smoking products is not permitted on any Itawamba Community College-owned property, which includes but is not limited to, buildings, grounds, parking areas, walkways, recreational and sporting facilities and college-owned vehicles. This policy applies to faculty, staff, students, contractors, vendors and visitors. The use of tobacco, including smoking, is prohibited in College facilities, outdoor areas and college-owned vehicles.

Itawamba Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the nondiscrimination policies: Dean of Students, 602 West Hill Street, Fulton, MS 38843, 662.862.8271, TitleIXCoordinator@iccms.edu.

Student Learner Outcomes

1. Describe the global distribution of livestock.
2. Describe historical changes in productivity of the U.S. livestock industries.
3. Compare food expenditures for at-home and away-from-home consumption in the United States.
4. Describe trends in red meat production.
5. Identify the physical structures of meat and muscle.
6. Compare the nutrient value of beef, pork, and lamb.
7. Discuss the balance of feeding 9 billion people while assuring a sustainable future.
8. Explain the role of risk assessment and risk management in decision making.
9. Compare conventional and organic production and the impact on food safety.
10. Overview the international and domestic beef, dairy, horse, poultry, sheep, goat, and swine industries.
11. Quantify the economic impact of the U.S. livestock industry.
12. Overview nontraditional livestock enterprises.
13. Discuss the reasons for broadening the genetic base in the beef industry.
14. Explain the role of sire summaries in genetic improvement.
15. Outline the various approaches to improving cattle performance in the major economic traits.
16. Describe the nutritive value of poultry meat and eggs.
17. Quantify poultry and egg consumption trends.
18. Overview the marketing of poultry and eggs.
19. Describe the nutritive value of milk.
20. Quantify the production of milk and dairy products.
21. Overview the marketing of milk products.
22. Compare and contrast commercial and farmer-feeders.
23. Discuss the cyclic nature of profitability in the beef industries.
24. Explain the use of break-even price discovery.
25. Identify the major edible and inedible by-products from livestock.
26. Explain the role of the rendering industry.
27. Discuss the options and challenges with dead livestock disposal.
28. Describe the market classes and grades of livestock.
29. Describe the USDA quality and yield grades of beef, pork, and lamb.
30. Describe the USDA grades for poultry and eggs.
31. Compare and contrast the performance of the primary dairy breeds.
32. Discuss the selection of dairy cattle for improved productivity.
33. Explain the need for dairy type description and linear classification.
34. Identify the primary male and female reproductive structures and their associated functions.
35. Describe the source, target and functions of the primary hormones affecting reproduction.
36. Describe the process of normal and abnormal parturition.

37. Explain the nutrient and milk yield relationship during lactation and gestation.
38. List the elements of a successful dairy nutrition program.
39. Compare and contrast profitable versus unprofitable dairies.
40. Describe the extent of Artificial Insemination in the livestock industry.
41. Explain the process of Artificial Insemination.
42. Compare and contrast several synchronization protocols.
43. Explain the value of sexed semen to the livestock industry.
44. List and describe the characteristics of the major swine breeds.
45. Discuss the effective use of performance records in the swine industry.
46. Describe the formation of gametes.
47. Define the role of DNA and RNA.
48. Discuss the role of biotechnology in the livestock industry.
49. Describe the six phases of pork production and the organization of hog enterprises.
50. Outline nutritional management across the swine industry.
51. Discuss the major environmental issues in the swine industry.
52. Explain the concept of genetic variation.
53. Describe the genetic model and its components.
54. Outline the evidence of genetic change in the livestock industry.
55. Compare and Contrast wool-type, meat-type, dual-purpose, and hair-type sheep breeds as well as fiber, dairy, and meat-type goat breeds.
56. Contrast the management of the sheep breeding season with other livestock.
57. Compare and contrast the purebred and commercial sheep production segments.
58. Describe the roles of animal breeders.
59. Describe the advantages and disadvantages of inbreeding, linebreeding, outcrossing and crossbreeding.
60. Discuss the role of composite and hybrid breed formation.
61. List the primary facilities and equipment required for sheep production.
62. Describe the nutritional management of ewes, rams, and lambs.
63. Discuss the basic management protocols associated with goat production.
64. Discuss the role of water, carbohydrates, fats, proteins, minerals, and vitamins in nutrition.
65. Discuss the process of energy utilization.
66. Classify the basic feedstuffs.
67. List and describe the primary light and draft horse breeds.
68. Describe the ideal conformation of the horse.
69. Discuss how to determine a horse's age by evaluating its teeth.
70. Define carnivores, omnivores, and herbivores.
71. Compare and contrast digestion in monogastric, ruminants, and poultry.
72. Discuss health management of equine.
73. Discuss the role of exercise in nutritional requirements of the horse.
74. Outline the nutritional and feeding practices used in the horse industry.
75. Describe reproductive management of the horse.
76. Describe the high-priority maintenance functions.
77. Discuss the most important minerals and vitamins involved in animal growth.
78. Explain the nutrient requirements for reproduction and lactation.
79. Describe the traditional breeds of poultry and their distinguishing characteristics.
80. List the primary facility and environmental management concerns in poultry enterprises.
81. Discuss the factors affecting profitability of poultry production.

Instructional Techniques

Weekly module assignments of textbook reading, watching and listening to video, and discussion of material from assignments.

Course Outline and Student Learning Objectives

eLearning Orientation Module

1. Comprehend and understand eLearning policies and procedures.

NOTE: Access to the 12 course-modules will NOT be granted until the eLearning Module is completed.

Module 1 Chapters 1, 3, 23 – Human Needs Satisfied by Animal Agriculture

1. Describe the global distribution of livestock.
2. Describe historical changes in productivity of the U.S. livestock industries.
3. Compare food expenditures for at-home and away-from-home consumption in the United States.
4. Describe trends in red meat production.
5. Identify the physical structures of meat and muscle.
6. Compare the nutrient value of beef, pork, and lamb.
7. Discuss the balance of feeding 9 billion people while assuring a sustainable future.
8. Explain the role of risk assessment and risk management in decision making.
9. Compare conventional and organic production and the impact on food safety.

Module 2 Chapters 2 and 24 – Overview of Livestock Industries & Beef Breeds

1. Overview the international and domestic beef, dairy, horse, poultry, sheep, goat, and swine industries.
2. Quantify the economic impact of the U.S. livestock industry.
3. Overview nontraditional livestock enterprises.
4. Discuss the reasons for broadening the genetic base in the beef industry.
5. Explain the role of sire summaries in genetic improvement.
6. Outline the various approaches to improving cattle performance in the major economic traits.

Module 3 Chapters 4, 5, and 25 – Poultry, Dairy, and Beef Nutrition and Management

1. Describe the nutritive value of poultry meat and eggs.
2. Quantify poultry and egg consumption trends.
3. Overview the marketing of poultry and eggs.
4. Describe the nutritive value of milk.
5. Quantify the production of milk and dairy products.
6. Overview the marketing of milk products.
7. Compare and contrast commercial and farmer-feeders.
8. Discuss the cyclic nature of profitability in the beef industries.
9. Explain the use of break-even price discovery.

Module 4 Chapters 7, 8, and 26 – Product classes of Livestock, Poultry, Eggs and Overview

of Dairy Cattle Breeds

1. Identify the major edible and inedible by-products from livestock.
2. Explain the role of the rendering industry.
3. Discuss the options and challenges with dead livestock disposal.
4. Describe the market classes and grades of livestock.
5. Describe the USDA quality and yield grades of beef, pork, and lamb.
6. Describe the USDA grades for poultry and eggs.
7. Compare and contrast the performance of the primary dairy breeds.
8. Discuss the selection of dairy cattle for improved productivity.
9. Explain the need for dairy type description and linear classification.

Module 5 Chapters 10 and 27 – Overview of Livestock Reproduction and Nutrition and Management of Dairy Cattle

1. Identify the primary male and female reproductive structures and their associated functions.
2. Describe the source, target and functions of the primary hormones affecting reproduction.
3. Describe the process of normal and abnormal parturition.
4. Explain the nutrient and milk yield relationship during lactation and gestation.
5. List the elements of a successful dairy nutrition program.
6. Compare and contrast profitable versus unprofitable dairies.

Module 6 Chapters 11 and 28 – Reproductive Technologies and Overview of Swine Breeds

1. Describe the extent of Artificial Insemination in the livestock industry.
2. Explain the process of Artificial Insemination.
3. Compare and contrast several synchronization protocols.
4. Explain the value of sexed semen to the livestock industry.
5. List and describe the characteristics of the major swine breeds.
6. Discuss the effective use of performance records in the swine industry.

Mid-Term Exam

- Will encompass Modules 1-6 and provide an opportunity for the student to display the knowledge gained from the first half of the course.

Module 7 Chapters 12 and 29 – Genetics Overview and Swine Management

1. Describe the formation of gametes.
2. Define the role of DNA and RNA.
3. Discuss the role of biotechnology in the livestock industry.
4. Describe the six phases of pork production and the organization of hog enterprises.
5. Outline nutritional management across the swine industry.
6. Discuss the major environmental issues in the swine industry.

Module 8 Chapters 13 and 30 – Breeding for Genetic Change and Overview of Sheep and Goat Breeds

1. Explain the concept of genetic variation.
2. Describe the genetic model and its components.
3. Outline the evidence of genetic change in the livestock industry.
4. Compare and Contrast wool-type, meat-type, dual-purpose, and hair-type sheep breeds as well as fiber, dairy, and meat-type goat breeds.
5. Contrast the management of the sheep breeding season with other livestock.

6. Compare and contrast the purebred and commercial sheep production segments.

Module 9 Chapters 14 and 31 – Mating Systems and Sheep and Goat Management

1. Describe the roles of animal breeders.
2. Describe the advantages and disadvantages of inbreeding, linebreeding, outcrossing and crossbreeding.
3. Discuss the role of composite and hybrid breed formation.
4. List the primary facilities and equipment required for sheep production.
5. Describe the nutritional management of ewes, rams, and lambs.
6. Discuss the basic management protocols associated with goat production.

Module 10 Chapters 15 and 32 – Importance of Nutrients and Horse Breeds and Breeding

1. Discuss the role of water, carbohydrates, fats, proteins, minerals, and vitamins in nutrition.
2. Discuss the process of energy utilization.
3. Classify the basic feedstuffs.
4. List and describe the primary light and draft horse breeds.
5. Describe the ideal conformation of the horse.
6. Discuss how to determine a horse's age by evaluating its teeth.

Module 11 Chapters 16 and 33 – Digestion and Absorption of Feed and Feeding and Managing Horses

1. Define carnivores, omnivores, and herbivores.
2. Compare and contrast digestion in monogastric, ruminants, and poultry.
3. Discuss health management of equine.
4. Discuss the role of exercise in nutritional requirements of the horse.
5. Outline the nutritional and feeding practices used in the horse industry.
6. Describe reproductive management of the horse.

Module 12 Chapters 17 and 34 – Nutrients for Body Functions and Poultry Management

1. Describe the high-priority maintenance functions.
2. Discuss the most important minerals and vitamins involved in animal growth.
3. Explain the nutrient requirements for reproduction and lactation.
4. Describe the traditional breeds of poultry and their distinguishing characteristics.
5. List the primary facility and environmental management concerns in poultry enterprises.
6. Discuss the factors affecting the profitability of poultry production.

Final Exam

- Will encompass Modules 7-12 and provide an opportunity for the student to display the knowledge gained from the second half of the course.