Equine Science – Course Syllabus

Instructor: S. Sirrena Wiggins
School: Johnson County High School
Contact: swiggins@jocoed.net
Classroom: SW 2
Semester: Fall/Spring 2025-26
Grade Level: 10–12
Credit: 1.0 Course C18HXX
Prerequisite: Agriscience C18H19

Course Description

Equine Science is an in-depth, semester-long course designed to introduce students to the biology, behavior, health, care, and economic significance of horses. Students will explore the history of domestication, equine anatomy and physiology, breeding, genetics, nutrition, training, and health care. Through hands-on labs, Supervised Agricultural Experience (SAE) programs, career exploration, and classroom instruction, students will gain the foundational knowledge and skills required for careers in the equine industry or further study in animal science.

Course Objectives

By the end of the course, students will be able to:

- Understand the domestication and historical impact of equine.
- Describe horse anatomy, physiology, nutrition, and behavior.
- Have knowledge of the application of equine management and husbandry techniques.
- Evaluate career and economic opportunities in the equine field.
- Implement safety and health practices related to equine handling.
- Design and maintain an equine-related SAE project and/or a Notebook-Recordkeeping
- Understand reproductive and genetic principles of horse breeding.
- Compare riding styles and tack across disciplines.
- Engage and gain understanding of equine ethics, welfare, and industry organizations.

Units of Study

Unit	Topic	Weeks	Standards Covered
1	Introduction to Equine Science & SAE Overview	1	—
2	History of Equine Domestication & Evolution	1	1.1
3	Supervised Agricultural Experience (SAE) Programs	1	1.2
4	Economic & Occupational Impact of the Equine Industry	2	2.1, 2.2
5	Business and Financial Recordkeeping (SAE Focus)	1	2.3
6	Equine Behavior and Psychology	1	3.1
7	Equine Health Regulations & Personal Safety	2	4.1, 4.2, 4.3
8	Anatomy and Physiology	2	5.1
9	Conformation & Soundness Evaluation	1	5.2, 5.3
10	Health & Basic Equine Management	2	6.1, 6.2, 6.3
11	Equine Nutrition and Digestive Systems	2	7.1–7.4
12	Breeds, Genetics & Color Identification	2	8.1–8.3
13	Equine Reproduction	2	9.1, 9.2
14	Animal Ethics and Welfare	1	10.1
15	Equine Organizations	1	11.1
16	Equitation Styles & Equipment	1	12.1
17	SAE Presentations & Final Projects	1	Comprehensive

Instructional Strategies

- Classroom instruction and interactive lectures
- Labs and hands-on activities
- Guest speakers and industry visits (where applicable)
- Group collaboration and presentations
- Multimedia (videos, case studies, online resources)
- Research-based projects and portfolio building

Assessment and Grading

Category	Weight
Daily Work & Participation	10%
Quizzes & Exams	25%
Labs & Hands-On Activities	15%
Projects & Presentations	20%
Notebook - SAE Recordbook & Reflections	20%
Final Exam / Capstone Project	10%

Supplies Required

- Internet access for research/homework

Classroom Expectations

- Respect all classmates, animals, and equipment
- Follow all safety guidelines
- Come prepared and engaged
- Submit work on time
- Demonstrate professionalism, especially during labs and fieldwork

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Safety & Laboratory Procedures

- All students must pass a safety exam with 100% accuracy
- Safety procedures for handling/interacting with equines, tools, and chemicals will be strictly enforced

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Key Texts and Resources

- *Equine Science classroom materials, worksheets, and interactives*
- Notebooks and/or SAE recordkeeping tools (AET or spreadsheet templates)
- Videos: Equine conformation, anatomy, riding styles
- Guest lectures from equine professionals
- Resources from industry organizations (American Jockey Club, AQHA, USEF, etc.)

Final Notes

This course supports FFA participation, career readiness, and post-secondary agricultural education pathways. Students are encouraged to compete in equine-related CDEs (Career Development Events) and explore local mentorships or job shadowing opportunities.

- **I have read and understand the course expectations:**

Parent Signature: _____

Student Signature : _____

Student Name (please print) : _____

Notes: