COURSE SYLLABUS – Veterinary Science
Grade Level: 10-12.
4th Period: 10:45 A.M. – 11:35 A.M.

Carlisle County High School
Agriculture Department
CREDIT(S): 1

Mr. Jonathan Miles Hargrove
4557 State Route 1377
Bardwell, KY 42023
1-270-628-3800-Ext. 4201
miles.hargrove@carlisle.kyschools.us

TITLE:
Veterinary Science.

COURSE DESCRIPTION:
This course introduces students to the field of veterinary science. Major topics include veterinary terminology, safety, sanitation, anatomy/physiology, clinical exams, hospital procedures, parasitology, posology, laboratory techniques, nutrition, disease, office management, and animal management. Careers are also explored. Leadership development will be provided through FFA. Each student will be expected to have an agricultural experience program.

PURPOSE:
To provide students interested in pursuing a career(s) in agriculture/animal science the opportunity to explore the wide array of concepts and opportunities relevant to the industry, as well as become exposed to and develop competencies in the skills relevant to the career cluster(s) dealing with animals, biological concepts and veterinary science in general.

COURSE OBJECTIVES:
To develop a broad, general understanding of various concepts pertaining to veterinary science. An emphasis will be placed on knowledge of general animal veterinary/medical concepts, practical experience and other fundamentals.

CONTENT OUTLINE:
The content outline consists of a general, introductory overview of employability skills relevant to the animal science industry, terminology, parasitology, posology, anatomy and physiology, disease, nutrition and continuous assessment work on Supervised Agriculture Experience Program (SAEP).

Classroom content outline MAY include, but is NOT limited to:

Introduction, FFA, Agriculture, and Animal Science
- Careers In Agricultural Systems Technology and In General Agriculture
- FFA Implications of the Class
- FFA/Leadership/SAE
- SAE’s
- Safety
- Applications to the Agriculture Industry

**Understanding Veterinary Roles**
- Work Performed
- Restraint Techniques
- Hazards
- Day-to-day Job
- Surgical Procedures
- Veterinary Medical Terminology

**Animal Body Systems**
- Skeletal System
- Muscular System
- Nervous System
- Circulatory System
- Respiratory System
- Urinary System
- Endocrine System
- Digestive System

**Veterinary Mathematics**
- Dose, Dosage, and Concentration
- Pill Calculations
- Injection Calculations
- Pearson Square Calculations
- Conversions

**Disease Control and Management**
- Vaccines
- Sanitation
- Quarantine
- Types of Diseases/Parasites

*The above schedule is subject to change without notice, with time extensions or shortenings on certain subjects. Schedule is subject to school activities, closings due to weather, or other occurrences. Please refer to school handbook for further information.

**INSTRUCTIONAL ACTIVITIES:**
- Lectures
- Demonstration
- Field trips/clinical experiences – job shadowing at Mayfield Veterinary Clinic
- Laboratory experiments
- Assessments
- Daily Participation
- Quizzes
- Group discussions
- Individual speeches

RESOURCES:
- Guest lecturers
- Textbooks
- Internet
- Local news media
- Local school media
- Classroom tools and resources
- Local veterinarian offices

GRADING PROCEDURES:
Letter grades will be assigned as follows:

A: 100%-90%
B: 89%-80%
C: 79%-70%
D: 69%-60%
F: Below 60%

Grades may be made on the basis of, but not limited to (students will be made aware of point values before assignments are given):
- Classroom Participation
- Daily Participation activities
- Quizzes
- Exams
- Semester/Final Exam
- Laboratory Assessments
- Research Papers, etc.
- Late Work: All students must be in compliance with the Kentucky Compulsory Attendance laws and statutes. A student who is absent for an “excused” reason will be given the opportunity to make-up the missed work, and will receive credit for any made-up work. A student will have the same number of days to make up work as the number of days missed. A student who is absent for unexcused reasons or for disciplinary reasons will be allowed to make up work but not be given credit for it. Students who accumulate an excessive number of absences per class, may be referred to the Attendance Review Committee of each school to evaluate the student’s academic progress. After evaluation, recommendations will be made in order for the student to stay abreast academically. Missed time may be completed hour for hour depending on time missed during Extended School Services.
- In addition to the above statement, late work will be dealt with in accordance to the classroom rules and expectations set forth. Please refer to them.

TEXT AND REFERENCES:
Various – Please see instructor for details.
**PREREQUISITES:**
Animal science or other introductory level agricultural education course.

**Veterinary Science**

**Valid KY Course # 020160**

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<table>
<thead>
<tr>
<th>NATIONAL AFNR STANDARDS</th>
<th>Content/Process statements followed by # codes in <strong>Bold = KOSSA Standards, Italic = Academic Expectations</strong></th>
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<tbody>
<tr>
<td>CS.07 and AS.06</td>
<td>Students will</td>
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<tr>
<td>AS.02</td>
<td>• Examine proper safety and sanitation techniques when handling various animal species. <strong>OJ002, OJ003, OJ005, OM003 1.1, 1.2, 1.3, 1.4, 1.5</strong></td>
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<tr>
<td>AS.02</td>
<td>• Discuss and explain multiple veterinary concepts and terminology. <strong>OA004, OI001, OL003, OL004, OL005, OL006, 1.1, 1.2, 1.3, 1.4, 1.10, 1.11, 1.12, 2.1</strong></td>
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<tr>
<td>AS.03</td>
<td>• Compare, examine, and identify the anatomy and physiology of various animal species using proper veterinary terminology. <strong>AC002, AC003, AC004, OA004 1.2, 2.1, 2.3, 2.4, 5.1</strong></td>
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<td>AS.03</td>
<td>• Take part in clinical exams of an assortment of animal species <strong>OA002, OA004, OF003, OH002, OL004, OL005, OL006 2.1, 2.3, 2.4, 5.1, 5.4</strong></td>
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<td>AS.03</td>
<td>• Examine appropriate hospital procedures and discover ways to apply them to veterinary science practices. <strong>AC003, OA004, OF003, OH003 1.1, 1.2, 1.3, 1.11, 1.12, 5.1, 6.1</strong></td>
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<tr>
<td>AS.03</td>
<td>• Define and differentiate among the various parasites, their causes, symptoms, treatments, and the animal species that can be affected. <strong>OL007, OF005, OH001, OH002, OH003, OH004, OH005 2.1, 2.3, 2.4</strong></td>
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<td>AS.04</td>
<td>• Discover how to utilize mathematical skills in the field of veterinary science. <strong>AB001, AB002, AB003, AB004, AB005, AB006, AB007, AB008, AB009, AB010, AB011 1.5, 1.6, 1.7,</strong></td>
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<tr>
<td>AS.03</td>
<td>1.8, 1.9, 2.7, 2.8, 2.9, 2.10, 2.11, 2.13</td>
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<td>• Develop laboratory techniques and take part in activities and procedures to further assist with the various veterinary science concepts. <strong>OA002, OA004, OF003</strong> 2.1, 5.1, 6.1</td>
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<td>• Define nutrient, list the nutrient groups, explain their functions, and explain how feed are balanced to meet nutrient requirements of animals. <strong>OA001, OA002, OF004, OH004</strong> 2.1, 2.3, 2.4</td>
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<td></td>
<td><strong>OE005</strong> 2.1, 2.3, 2.4</td>
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<tr>
<td>AS.03</td>
<td>2.1, 5.1, 6.1</td>
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<tr>
<td>• Explain and discuss the principals of disease and evaluate how they affect numerous animal species. <strong>OH001, OH002, OH003, OH004, OH005</strong> 2.1, 2.3, 2.4</td>
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<td>AS.06</td>
<td>2.1, 2.3, 2.4</td>
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<td>• Discuss appropriate animal management practices and how they relate to veterinary science. <strong>OA002, OA003, OI001, OH003</strong> 2.1, 2.3, 2.4</td>
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<td>ABS.03</td>
<td>1.11, 2.13, 2.18</td>
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<td>• Maintain records on supervised agricultural experience program and be able to summarize and analyze results in making financial decisions. <strong>OD001, OD002</strong></td>
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<td>CS.01</td>
<td>1.12, 2.16, 2.37</td>
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<td>• Utilize activities of FFA as an integral component of course content and leadership development. <strong>AA015, AA016</strong> 1.12, 2.16, 2.37</td>
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<td>CS.01</td>
<td>1.9, 1.10, 1.12</td>
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<td>• Apply science, math and communication skills within the technical content. <strong>AB003, AB004, AB005, AB006, AB007, AB008, AB011, EA011, EA012, EA013, ED002, ED003, ED005, ED006</strong></td>
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**CONNECTIONS**

- PROGRAM OF STUDIES – REVISED 2006
- KENTUCKY OCCUPATIONAL SKILL STANDARDS (KOSSA: Livestock/Animal Science Area)
- ACADEMIC EXPECTATIONS
- SECRETARY’S COMMISSION ON ACHIEVING NECESSARY SKILLS (SCANS)
- FFA CONNECTIONS: All Animal Impromptu Speaking areas, animal judging contest, poultry contest, dairy foods contest, meats judging team, Local and State Fair Animal shows, Veterinary Science proficiencies, University Field Day Contest focused on animals, Horse judging contest,