

**Course Title: Introduction to Veterinary Science**

<b>Unit 1:</b>	<b>Career Opportunities</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Compare job characteristics of various careers in veterinary science.</li> </ol>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Explain work and the benefits that people get from work.</li> <li>2. Explain the meaning of career ladder and the relationship of occupations in veterinary science to career success.</li> <li>3. Explain entrepreneurship versus placement as related to occupations.</li> <li>4. Name and describe the major areas of veterinary science occupations based on the nature of the work.</li> <li>5. Name and describe the major areas of veterinary science occupations based on level of employment.</li> <li>6. Identify the factors to consider in selecting an occupation in veterinary science.</li> </ol>
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<b>Essential Question(s):</b>	What is the process that a student uses to choose a career path?
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Content Knowledge	Suggested Instructional Activities Rigor & Relevance Framework (Quadrant)	Suggested Materials, Equipment and Technology Resources
<ol style="list-style-type: none"> <li>I. Define Work                             <ol style="list-style-type: none"> <li>A. Employment</li> <li>B. Benefits of Work</li> </ol> </li> <li>II. Define Career Ladder                             <ol style="list-style-type: none"> <li>A. Occupation vs. Career vs. Job</li> <li>B. Define entrepreneurship</li> <li>C. Define Placement</li> <li>D. Clustering occupations based on the nature of the work                                     <ol style="list-style-type: none"> <li>1. Professional</li> <li>2. Managerial</li> <li>3. Technical</li> <li>4. Skilled</li> <li>5. Semi-Skilled</li> <li>6. Unskilled</li> </ol> </li> </ol> </li> </ol>	<p>Lecture with PowerPoint                      Presentation                      Brainstorming                      Application Cards                      Poster                      Oral Presentation                      Work Based Learning</p>	<p>Textbook                      Support Material  <a href="http://www.bls.gov/oco/print/ocos076.htm">http://www.bls.gov/oco/print/ocos076.htm</a>  <a href="http://en.wikipedia.org/wiki/Entrepreneurship#Characteristics_of_entrepreneur">http://en.wikipedia.org/wiki/Entrepreneurship#Characteristics_of_entrepreneur</a>  <a href="http://www.careeronestop.org/ExploreCareers/SelfAssessments/FindAssessme">http://www.careeronestop.org/ExploreCareers/SelfAssessments/FindAssessme</a>                      Reference Books                      Computers                      Internet                      Printer                      Handouts                      Teacher designed materials</p>

<p>III. Factors should be considered in selecting an occupation</p> <ul style="list-style-type: none"> <li>A. Interests</li> <li>B. Abilities</li> <li>C. Education and training requirements</li> <li>D. Nature of the work</li> <li>E. Earnings</li> <li>F. Location of the occupation</li> <li>G. Future</li> <li>H. Family ties</li> </ul>		
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<b>Unit Assessment:</b>	Posters, Projects, Oral Presentation, Portfolios, Performance Tasks
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<b>Unit/Course CTSO Activity:</b>	Students will use this unit as a basis for the development of a Supervised Agriscience Experience (SAE).
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<b>Unit/Course Culminating Product:</b>	<p>Students will organize a plan of action for the development of a successful future career.</p> <p>Students will write a cover letter and résumé for a career in the veterinary industry.</p> <p>Students will generate a brochure on a university or college offering a program in veterinary science.</p>
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<b>Course/Program Credential(s):</b> <input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree <input type="checkbox"/> Other:
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**Course Title: Introduction to Veterinary Science**

<b>Unit 2:</b>	<b>Safety</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>Identify safety precautions for veterinary science personnel.</li> </ol>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>Determine the appropriate safety precautions for a given scenario</li> <li>Explain what OSHA is and know its purpose</li> <li>Describe the different methods of sanitation and know when to use them</li> <li>Give examples of the four types of safety hazards</li> </ol>
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<b>Essential Question(s):</b>	What are the types of hazards common in the veterinary hospital and the organization that regulates safety standards in the workplace?
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
<p>I. Hazards in the veterinary workplace</p> <p>A. Types of Safety Hazards</p> <ol style="list-style-type: none"> <li>Physical Hazards               <ol style="list-style-type: none"> <li>Proper clothing and footwear</li> <li>Animal handling and restraint methods</li> </ol> </li> <li>Chemical Hazards               <ol style="list-style-type: none"> <li>Drugs</li> <li>Cleaning agents</li> <li>Insecticides</li> <li>Anesthetic gases                   <ol style="list-style-type: none"> <li>Biological Hazards</li> <li>Medical Waste Tracking Act of 1988</li> </ol> </li> </ol> </li> </ol>	<p>Carousel Brain-Storming</p> <p>10 + 2 Discussion</p> <p>Collaborative Learning</p> <p>Lecture with PowerPoint &amp; Internet Access</p> <p>Note-taking</p> <p>Lecture with PowerPoint &amp; Internet Access</p> <p>Online Activities</p> <p>Graphic Organizers</p> <p>Research</p> <p>Lecture with PowerPoint</p> <p>Flashcards</p> <p>Internet Research</p>	<p>Essential Question</p> <p>PowerPoint</p> <p>Internet</p> <p>Computer &amp; Printer</p> <p>Websites</p> <p><a href="http://www.merckvetmanual.com/mvm/index.jsp">http://www.merckvetmanual.com/mvm/index.jsp</a></p> <p>Handouts</p> <p><a href="http://www.epa.gov/">http://www.epa.gov/</a></p> <p><a href="http://www.epa.gov/epaoswer/other/medical/tracking.htm">http://www.epa.gov/epaoswer/other/medical/tracking.htm</a></p> <p><a href="http://en.wikipedia.org/wiki/Rabies">http://en.wikipedia.org/wiki/Rabies</a></p> <p><a href="http://en.wikipedia.org/wiki/Encephalitis">http://en.wikipedia.org/wiki/Encephalitis</a></p> <p><a href="http://www.cdc.gov/healthypets/diseases/catscratch.htm">http://www.cdc.gov/healthypets/diseases/catscratch.htm</a></p> <p><a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g_pet.htm">http://www.cdc.gov/ncidod/dbmd/diseaseinfo/leptospirosis_g_pet.htm</a></p>

<ul style="list-style-type: none"> <li>5. Environmental Protection Agency (EPA)</li> <li>6. Sharps containers</li> <li>C. Zoonotic Hazards <ul style="list-style-type: none"> <li>a. Viruses</li> <li>b. Rabies (Hydrophobia)</li> <li>c. Sleeping sickness (Encephalitis)</li> <li>1. Bacteria <ul style="list-style-type: none"> <li>a. Cat Scratch Fever</li> <li>b. Leptospirosis</li> <li>c. Salmonellosis</li> <li>d. Brucellosis</li> <li>e. Anthrax</li> <li>f. Tuberculosis</li> </ul> </li> <li>2. Parasites <ul style="list-style-type: none"> <li>a. Sarcoptic mange</li> <li>b. Toxoplasmosis</li> <li>c. Visceral Larva Migrans (Toxocariasis)</li> <li>d. Creeping Eruption (Ancylostomiasis)</li> </ul> </li> <li>3. Fungi <ul style="list-style-type: none"> <li>a. Ringworm</li> </ul> </li> </ul> </li> <li>II. Occupational Health and Safety Administration (OSHA) <ul style="list-style-type: none"> <li>A. Hazard Communication Standard (HCS)</li> </ul> </li> <li>III. Material Safety Data Sheet (MSDS) <ul style="list-style-type: none"> <li>A. Parts of an MSDS <ul style="list-style-type: none"> <li>Manufacturer Information</li> <li>Hazard Ingredients/ Identity Information</li> <li>Physical/Chemical Characteristics</li> <li>Fire and Explosion Hazard Data</li> <li>Reactivity Data</li> <li>Health Hazard Data</li> <li>Precautions for Safe Handling and Use</li> <li>Control Measures</li> </ul> </li> </ul> </li> <li>IV. Safety signs &amp; equipment</li> <li>V. Drug use and safety</li> <li>VI. Comprehensive Drug Abuse Prevention and Control Act (1970) <ul style="list-style-type: none"> <li>A. Controlled Substances Act</li> </ul> </li> </ul>	<p>10 + 2 Discussion  Note-taking  Demonstrations</p>	<p><a href="http://www.cdc.gov/healthypets/diseases/salmonellosis.htm">http://www.cdc.gov/healthypets/diseases/salmonellosis.htm</a>  <a href="http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_g.htm">http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_g.htm</a>  <a href="http://www.cdc.gov/nczved/dfbmd/disease_listing/anthrax_gi.html">http://www.cdc.gov/nczved/dfbmd/disease_listing/anthrax_gi.html</a>  <a href="http://www.aphis.usda.gov/animal_health/animal_diseases/tuberculosis/">http://www.aphis.usda.gov/animal_health/animal_diseases/tuberculosis/</a>  <a href="http://en.wikipedia.org/wiki/Mange">http://en.wikipedia.org/wiki/Mange</a>  <a href="http://www.cdc.gov/toxoplasmosis/">http://www.cdc.gov/toxoplasmosis/</a>  <a href="http://www.cdc.gov/ncidod/dpd/parasites/toxocara/factsheet_toxocara.htm">http://www.cdc.gov/ncidod/dpd/parasites/toxocara/factsheet_toxocara.htm</a>  <a href="http://www.cdc.gov/ncidod/dpd/parasites/hookworm/factsheet_hookworm.htm">http://www.cdc.gov/ncidod/dpd/parasites/hookworm/factsheet_hookworm.htm</a>  <a href="http://en.wikipedia.org/wiki/Material_safety_data_sheet">http://en.wikipedia.org/wiki/Material_safety_data_sheet</a>  <a href="http://www.osha.gov/">http://www.osha.gov/</a>  <a href="http://en.wikipedia.org/wiki/Material_safety_data_sheet">http://en.wikipedia.org/wiki/Material_safety_data_sheet</a>  Internet  Computer &amp; Printer  <a href="http://www.nmsu.edu/~safety/resources/safety_signs.htm">http://www.nmsu.edu/~safety/resources/safety_signs.htm</a></p>
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<p>VII. Sanitation</p> <p>VIII. Types of sanitation</p> <ul style="list-style-type: none"> <li>A. Cleaning</li> <li>B. Disinfecting</li> <li>C. Sterilizing</li> <li>D. Antiseptics</li> </ul> <p>IX. Common used chemicals</p> <ul style="list-style-type: none"> <li>A. Alcohols <ul style="list-style-type: none"> <li>1. Ethyl alcohol</li> <li>2. Isopropyl alcohol</li> <li>3. Ethanol</li> </ul> </li> <li>B. Aldehydes <ul style="list-style-type: none"> <li>1. Gluteraldehyde</li> <li>2. Formaldehyde</li> </ul> </li> <li>C. Chlorine <ul style="list-style-type: none"> <li>1. Bleach <ul style="list-style-type: none"> <li>a. Iodine and Iodophors</li> </ul> </li> <li>2. Betadine <ul style="list-style-type: none"> <li>a. Quaternary ammonias</li> </ul> </li> <li>3. Centrimide</li> <li>4. Quatsyl-D</li> </ul> </li> </ul> <p>X. Methods of sanitation</p> <ul style="list-style-type: none"> <li>A. Physical Cleaning</li> <li>B. Cold Sterilization</li> <li>C. Dry Heat</li> <li>D. Radiation</li> <li>E. Filtration</li> <li>F. Ultrasound</li> <li>G. Autoclave</li> </ul>		
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<b>Unit Assessment:</b>	Teacher Observations, Tests, Performance Tasks, Projects, Posters, Quizzes, Demonstrations, Oral Presentations
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<b>Unit/Course CTSO Activity:</b>	FFA Career Development Events
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**Unit/Course  
Culminating  
Product:**

Students will design a veterinary safety portfolio based on information obtained from various resources.  
Students will develop posters illustrating safety procedures in veterinary science.

**Course/Program Credential(s):**  Credential  Certificate  Postsecondary Degree  University Degree  
 Other:

## Course Title: Introduction to Veterinary Science

Unit 3:	<b>Humane Treatment</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>3. Describe responsibilities of animal control and humane societies.             <ul style="list-style-type: none"> <li>• Describing responsible ownership of animals</li> </ul> </li> <li>4. Describe humane treatment of animals.</li> <li>5. Describe effects of captivity on exotic animals.</li> </ol>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Discuss the issue of animal rights vs. welfare.</li> <li>2. Explain the human/animal bond.</li> <li>3. List the ways in which animals are a part of their lives.</li> </ol>
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<b>Essential Question(s):</b>	What is the importance of animals in their lives and the many roles that animals play in society?
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Content Knowledge	Suggested Instructional Activities Rigor & Relevance Framework (Quadrant)	Suggested Materials, Equipment and Technology Resources
<ol style="list-style-type: none"> <li>I. Responsibilities of animal control and humane societies.</li> <li>II. Responsible ownership of animals             <ol style="list-style-type: none"> <li>A. Animal Issues                 <ol style="list-style-type: none"> <li>1. Abuse and neglect</li> <li>2. Illegal capture and trade</li> <li>3. Overpopulation</li> <li>4. Euthanasia</li> <li>5. Production agriculture</li> <li>6. Hunting</li> <li>7. Education and research</li> <li>8. Endangered species</li> </ol> </li> </ol> </li> <li>III. Humane treatment of animals.</li> <li>IV. Animal Rights</li> <li>V. Animal Welfare</li> </ol>	<p>Lecture with PowerPoint            Agreement Circles            10 + 2 Discussions            Note taking            Graphic Organizers            Research            Position Papers            Oral Presentations</p>	<p>Computer            Printer            Internet            Textbook            Reference Book            Handouts            Teacher Designed Materials  <a href="http://en.wikipedia.org/wiki/Animal_rights">http://en.wikipedia.org/wiki/Animal_rights</a>  <a href="http://www.aphis.usda.gov/animal_welfare/index.shtml">http://www.aphis.usda.gov/animal_welfare/index.shtml</a>  <a href="http://en.wikipedia.org/wiki/Animal_welfare">http://en.wikipedia.org/wiki/Animal_welfare</a>  <a href="http://en.wikipedia.org/wiki/Introduced_species">http://en.wikipedia.org/wiki/Introduced_species</a></p>

VI. Effects of captivity on exotic animals.		
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Unit Assessment:	Poster, Presentation, Test, Group Project, Case studies, Debates, Performance Tasks
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Unit/Course CTSO Activity:	FFA Public Speaking & Career Development Events
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Unit/Course Culminating Product:	Students will conduct a debate on topics that are discussed in this unit. Students will develop a PowerPoint presentation to be presented to the class on assigned topics.
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Course/Program Credential(s):	<input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input type="checkbox"/> Postsecondary Degree <input type="checkbox"/> University Degree
<input type="checkbox"/> Other:	

**Course Title: Introduction to Veterinary Science**

<b>Unit 4:</b>	<b>Laws and Regulations</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <p>6. Identify laws and regulations involving animals.                  Examples: leash laws, noise control, mandatory euthanasia</p>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <p>1. Identify numerous agencies involved in the protection of animals in various ways.                  2. Discuss the history and laws/regulations effecting animals.</p>
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<b>Essential Question(s):</b>	Why should society have laws to that deal with animals?
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
<p>I. History of laws and regulations involving animals.</p> <p>A. 1641 – The Body of Liberties legal code passed by the Massachusetts Bay Colony</p> <p>B. 1828 – First anti-cruelty law passed by New York legislature</p> <p>C. 1866 – American Society for the Prevention of</p> <p>D. Cruelty to Animals (ASPCA) was formed</p> <p>E. 1867 – Henry Bergh drafted “An Act for More</p> <p>F. Effectual Prevention of Cruelty to Animals</p> <p>G. 1906 – The Animal Transportation</p>	<p>Lecture with PowerPoint</p> <p>Inquiry</p> <p>Guest Speakers</p> <p>Note-taking</p> <p>Projects</p> <p>Research</p> <p>Position Paper</p> <p>SWOT Analysis</p> <p>Homework</p>	<p>Computer</p> <p>Printer</p> <p>Internet</p> <p>Handouts</p> <p>Teacher Designed materials</p> <p>Textbooks</p> <p>Reference Books</p> <p>Virtual Library</p>

Act

- H. 1958 – The Humane Slaughter Act
- I. 1966 – Laboratory Animal Welfare Act (AWA)
- J. 1970 – AWA was amended
- K. 1970 – The Horse Protection Act
- L. 1972 –Marine Mammal Protection Act
- M. 1973 – Endangered Species Act
- N. 1976 – Horse Protection Act was amended
- O. 1985 – Improved Standards for Laboratory Animals Act
- P. 1989 –The Farm Animal and Research Facilities
- Q. Protection Act
- R. 1990 – Food, Agriculture, Conservation and Trade Act
- S. 1992 – The Animal Enterprise Protection Act
- T. 1999 – “Federal Law Enforcement Animal Protection Act
- U. 2002 – AWA amended
- V. 2002 – Animal Fighting Enforcement Act
- W. 2002 – Captive Wildlife Safety Act

II. Animal agencies

- A. HSUS – The Humane Society of the United States
- B. ASPCA – American Society for the Prevention of Cruelty to Animals
- C. AWI – Animal Welfare Institute
- D. NAIA – National Animal Interest Alliance
- E. PETA – People for the Ethical Treatment of Animals
- F. APHIS--Animal and Plant Health Inspection Service

Unit Assessment:	Tests, Portfolios, Oral Presentations, Posters, Projects, Case Studies, Research Teams
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Unit/Course CTSO Activity:	FFA Career Development Event
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Unit/Course Culminating Product:	Students will make a display on the historical events in animal laws. Students will create a multimedia presentation on animal agencies.
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Course/Program Credential(s):	<input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree
<input type="checkbox"/> Other:	

## Course Title: Introduction to Veterinary Science

<b>Unit 5:</b>	<b>Anatomy and Physiology</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Describe various body systems of animals, including skeletal, muscular, circulatory, respiratory, nervous, urinary, endocrine, and digestive.</li> </ol>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Describe the functions of the skeletal, muscular, circulatory, respiratory, and nervous systems.</li> <li>2. Identify the bones of the skeleton and relate them to a live animal.</li> <li>3. Identify ten muscles and relate them to a live animal.</li> <li>4. Identify structures of the heart, as well as major veins and arteries.</li> <li>5. Identify parts of the upper and lower respiratory tract.</li> <li>6. Identify parts of nerve cells and the brain.</li> <li>7. Describe how the body seeks to maintain a state of homeostasis.</li> </ol>
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<b>Essential Question(s):</b>	Why is a basic understanding of anatomy and physiology essential for the veterinary science?
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Content Knowledge	Suggested Instructional Activities Rigor & Relevance Framework (Quadrant)	Suggested Materials, Equipment and Technology Resources
<ol style="list-style-type: none"> <li>I. Anatomical terminology               <ol style="list-style-type: none"> <li>A. Skeletal                   <ol style="list-style-type: none"> <li>1. Classification of bones</li> <li>2. Identification of bones</li> <li>3. Bone anatomy</li> <li>4. Bone fractures</li> </ol> </li> <li>B. Muscular                   <ol style="list-style-type: none"> <li>1. Types of muscle</li> <li>2. Identification of major muscles</li> </ol> </li> </ol> </li> <li>3. Muscle movement Circulatory</li> <li>II. Identification of circulatory system parts               <ol style="list-style-type: none"> <li>A. Blood components</li> <li>B. Heart Structures</li> </ol> </li> </ol>	<p>Lecture with PowerPoint 10+2 Discussion Homework Guided Practice Graphic Organizers Case studies Research Worksheets Flashcards Guest Speakers</p>	<p><a href="http://www.vet.purdue.edu/bms/vldl/ANMENU.html">http://www.vet.purdue.edu/bms/vldl/ANMENU.html</a>  <a href="http://bio.rutgers.edu/~gb102/virtuallabs_102.html">http://bio.rutgers.edu/~gb102/virtuallabs_102.html</a>            Computer &amp; Printer            Internet            Videos            Teacher Designed Materials            Textbooks            Reference Books            Handouts  <a href="http://www.cvmbs.colostate.edu/clinsci/wing/emcases/">http://www.cvmbs.colostate.edu/clinsci/wing/emcases/</a></p>

<p>C. Blood vessels</p> <p>III. Respiratory</p> <p>A. Identification of respiratory parts</p> <ol style="list-style-type: none"> <li>1. Upper Respiratory</li> <li>2. System</li> <li>3. Lower Respiratory System</li> <li>4. Breathing</li> </ol> <p>IV. Nervous</p> <p>A. Types of Neurons</p> <ol style="list-style-type: none"> <li>1. Sensory neurons</li> <li>2. Connecting neurons</li> <li>3. Motor neurons</li> </ol> <p>B. Parts of a Neuron</p> <p>V. Identification of Nervous System parts</p> <p>A. Central Nervous System</p> <p>B. Peripheral Nervous System</p> <p>VI. Urinary</p> <p>a. Identification of Urinary &amp; Renal System parts</p> <p>VII. Endocrine</p> <p>A. Identification of Endocrine System parts</p> <p>VIII. Digestive</p> <p>A. Identification of Digestive System parts</p> <p>IX. Reproductive</p> <p>A. Identification of Reproductive System parts</p>		
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<p><b>Unit Assessment:</b></p>	<p>Tests, Portfolios, Project, Posters, Student Designed Assessments, Oral Presentations, Journals</p>
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<p><b>Unit/Course CTSO Activity:</b></p>	<p>FFA Career Development Events</p>
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<b>Unit/Course Culminating Product:</b>	Students will apply their knowledge by reading and analyzing several professional journal articles. Students will apply terms used in unit to analyze a group of case studies. Students will construct a portfolio of drawing and illustrations on topics covered in unit.
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Course/Program Credential(s):  Credential  Certificate  Postsecondary Degree  University Degree  
 Other:

**Course Title: Introduction to Veterinary Science**

<b>Unit 6:</b>	<b>Animal Health</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <p>8. Identify methods of disease prevention in animals.          Examples: worming, vaccination</p> <ul style="list-style-type: none"> <li>• Analyzing symptoms of animal diseases for diagnostic purposes</li> <li>• Selecting drugs to treat animals          Examples: antibiotics, wormers</li> <li>• Describing environmental factors affecting animals</li> </ul> <p>9. Demonstrate procedures for administering vaccinations, including subcutaneous and intramuscular.</p> <p>10. Identify proper hygiene for animals.</p> <p>11. Describe normal and abnormal animal behaviors.          Examples: normal—signs of contentment, playfulness abnormal—aggression, loss of appetite</p>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	
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<b>Essential Question(s):</b>	
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
<p>I. Methods of disease prevention in animals.</p> <p>A. Symptoms of animal diseases for diagnostic purposes</p> <p>1. Characteristics of a healthy animal</p> <p>a. Clear bright eyes with pink membranes around the eyes.</p> <p>b. An appearance of contentment.</p> <p>c. An alert attitude and</p>		

- interest in surroundings.
  - d. A good appetite.
  - e. A sleek, shiny coat with hair that is pliable, not dry and a brittle.
  - f. Feces and urine that is easily passed and normal in appearance.
  - g. Temperature, pulse, and respiration in normal range.
2. Equipment needed for exams
    - a. Stethoscope
    - b. Thermometer and petroleum jelly
    - c. Ophthalmoscope
    - d. Otoscope
    - e. Watch with second hand
    - f. Muzzle
  3. The Physical Exam
    - a. Palpation
    - b. Auscultation
    - c. Lungs
    - d. Heart
  4. Temperature, Pulse, and Respiration (TPR)
    - a. Temperature
      - Taken rectally
    - b. Variations in temperature
      - Infection/disease
      - Excitement/stress
      - Environment
  5. Pulse
    - a. Use femoral artery on dogs and cats
    - b. Use the maxillary artery for large animals
    - c. Use ventral tail vein and

lower jaw on cattle and sheep

6. Variations in pulse
  - a. Anxiety
  - b. Exercise
  - c. Pain
  - d. Disease
  - e. Shock
7. Respiration
  - a. Common terms used to describe
    1. Eupnea
    2. Dyspnea
    3. Tachypnea
  - b. Area to examine during Physical Exam
    1. General appearance
    2. Integumentary (skin)
    3. Muscoskeletal (muscles and skeletal structure)
    4. Circulatory
    5. Respiratory
    6. Digestive
    7. Genitourinary (genitals and urinary system)
    8. Nervous system
    9. Lymph nodes
    10. Ears
    11. Eyes
    12. Mouth
8. Therapeutics and Prevention
  - a. Vaccines
    - 1..Modified-live vaccines
    - 2..Killed vaccines
  - b. Drugs

c. Surgery Alternative  
Therapy

1. Vitamin and mineral supplements
2. Massage therapy
3. Acupressure
4. Magnetic therapy
5. Meditation
6. Herbal therapy
7. Hypnotherapy
8. Chiropractics

B. Selecting drugs to treat animals

1. antibiotics, wormers

C. Environmental factors affecting animals

1. Causes of Disease
  - a. Infectious diseases
  - b. Non-infectious diseases

II. Procedures for administering vaccinations

A. Routes of administering medication

1. Oral
2. Nasal
3. Subcutaneous injection (SubQ)
4. Intramuscular injection (IM)
5. Intraperitoneal injection (IP)
6. Intravenous injection (IV)

B. Styles of Syringes

1. Luer-Lok tip
2. Slip tip
3. Eccentric tip
4. Catheter tip

III. Proper hygiene for animals.

IV. Describe normal and abnormal animal behaviors.

A. Health indicators

1. Clear, bright eyes
2. Smooth, glossy coat
3. Good appetite
4. Energy Interest in surroundings

<p>B. Contributors to health</p> <ol style="list-style-type: none"> <li>1. Exercise</li> <li>2. Good medical care</li> <li>3. Proper nutrition</li> <li>4. Disease prevention</li> <li>5. Shelter from the elements</li> <li>6. Adequate human/animal/environmental interaction and stimulation</li> </ol> <p>C. Signs of Disease</p> <ol style="list-style-type: none"> <li>1. Dull, rough coat</li> <li>2. Dull eyes</li> <li>3. No appetite</li> <li>4. No energy</li> <li>5. Vomiting/diarrhea</li> <li>6. Lameness</li> <li>7. Behavioral changes</li> </ol> <p>d. Factors Causing Disease</p> <ol style="list-style-type: none"> <li>1. Poor nutrition</li> <li>2. Environmental factors</li> <li>3. Parasites</li> <li>4. Infectious agents</li> <li>5. Non-infectious factors</li> </ol>		
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<b>Unit Assessment:</b>	
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<b>Unit/Course CTSO Activity:</b>	
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<b>Unit/Course Culminating Product:</b>	
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<b>Course/Program Credential(s):</b> <input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input type="checkbox"/> Postsecondary Degree <input type="checkbox"/> University Degree <input type="checkbox"/> Other:
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**Course Title: Introduction to Veterinary Science**

<b>Unit 7:</b>	<b>Veterinary Services</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	Students will: 12. Differentiate among veterinary services for various animals.
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	Students will: 1. Compare the breeds of various animals of served in a veterinary clinic. 2. Discuss the proper methods of handling, feeding and exercising various animals of served in a veterinary clinic. 3. Discuss the grooming and health of various animals of served in a veterinary clinic. 4. Discuss the housing and equipment needs of various animals of served in a veterinary clinic.
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<b>Essential Question(s):</b>	Are all animals created the same?
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
I. Differentiate among veterinary services for various animals. A. Dogs B. Cats C. Rabbits D. Hamsters & Gerbils E. Rats & Mice F. Guinea Pigs G. Chinchillas H. Ferrets I. Amphibians J. Reptiles K. Birds L. Fish M. Livestock & Farm Animals	Lecture with PowerPoint Note taking Graphic Organizers Case Studies Discussion Homework Research Project Oral Presentations Virtual Field Trips	Computer & Printer Internet Textbook Reference Books Teachers Designed Materials Handouts Rubrics Virtual Library Websites

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<b>Unit Assessment:</b>	
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<b>Unit/Course CTSO Activity:</b>	
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<b>Unit/Course Culminating Product:</b>	
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<b>Course/Program Credential(s):</b> <input type="checkbox"/> <b>Credential</b> <input type="checkbox"/> <b>Certificate</b> <input type="checkbox"/> <b>Postsecondary Degree</b> <input type="checkbox"/> <b>University Degree</b> <input type="checkbox"/> <b>Other:</b>
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