

Imperial Valley Regional Occupational Program  
 687 State Street, El Centro, CA 92243  
 (760) 482-2600 • Fax (760) 482-2751 • Website: [www.ivrop.org](http://www.ivrop.org) • Email: [info@ivrop.org](mailto:info@ivrop.org)  
**Course Title: Vet Science Instructor: Emilee Callens Hours:**

Major Units of Instruction Ag/Natural Resources Sector – (D) Animal Science Pathway	Key Assignments/ Common Assessments	Standards (Anchor / Pathway)	Academic / Common Core Standards
1. Essential Employability / Career Preparation Skills a. Understand how personal skill development affect employability (positive attitude, honesty, self-confidence, time management) b. Understand principles of effective interpersonal skills (group dynamics, conflict resolution negotiations) e. Understand occupational safety issues and observes all safety rules f. Understand career awareness, paths and strategies for obtaining employment g. Understand and adapt to changing technology h. Understand and prepare for employment (resume, job application, job interview, portfolio development) – job search skills	IVROP Common Assessments: 1. Oral Presentation Assignment, 2. Application and Resume Assignment(s) Portfolio	2.0 Comm. 3.0 Career Planning & Management  CC3.6 CC 8.0 CC 9.0 B 1.0 CC 10.0	LS 9-10, 11-12.6 SLS 11 – 12.2
2. ANATOMY OF PHYSIOL a. Demonstrate the ability to be a leader and describe the qualities that effective leaders should possess 9.1 b. Be familiar with parliamentary procedure 9.2 c. Have a working knowledge of how to prepare and give a speech 2.4 (2.2) d. Identify the qualities that an employee should possess and how to obtain a job through this knowledge 3.1, 8.3 e. Identify the attitude and behavior of healthy animals D9.1 f. Monitor the temperature, pulse, and respiration of animals, and compare the monitored animal to that of a normal g. Write an essay on the disease concept of animal health 2.2, D6.0 (all) h. Demonstrate the need for a balanced diet in animal production by balancing a ration D2.0, D10.0 i. Design a housing facility for a small and large animal that provides for a healthy environment D10.1 j. Distinguish between sound and unsound animal disease management techniques D6.0 k. Demonstrate the need for proper sanitation and disaffectation of an animal's environment by taking bacterial cultures and analyzing them l. Recognize the characteristics of epithelium, connective, and muscle tissue by microscope observation m. Differentiate among the functions of the digestive, circulatory, respiratory, and excretory systems n. Distinguish between living and non-living causes of disease in animals o. Identify life cycles of bacteria, fungi, virus, and protozoa D6.0 p. Classify the various means by which diseases are spread in an			

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<p>environment <i>D6.0</i></p> <p>q. Cite the way in which an animal develops resistance and immunity to pathogenic organisms <i>D6.0</i></p> <p>r. Contrast the primary and secondary defense mechanisms of an animal's body</p> <p>s. Explain how a change in environmental conditions might alter the growth of a bacterium <i>D6.0</i></p> <p>t. Outline a common method by which a producer could control diseases caused by a parasite <i>D6.5</i></p> <p>u. Be able to identify the major parasites that affects animals <i>D6.3</i></p> <p>v. Prepare a written report on an animal disease <i>2.2(2.3), D6.0</i></p> <p>w. Identify the differences between ticks, fleas, mites, flies, and lice</p> <p>x. Develop a method to control external parasites taking into consideration <i>D6.0</i></p> <p>y. Outline a viable program for internal parasite management in small and large animals <i>D6.0</i></p> <p>z. Explain the importance of proteins, vitamins, and minerals as they relate to tissue building by nutritional experiment <i>D2.0</i></p> <p>aa. Discriminate between symptoms of poisoned animals and that of parasitized animals <i>D6.0</i></p> <p>bb. Calculate the proper dosage of medication to be prescribed by large or small animals</p> <p>cc. Identify environmental, nutritional, and pathogenic stressors that might lower an animal's resistance to diseases <i>D6.0</i></p> <p>dd. Develop a management technique for receiving young transported animals</p> <p>ee. Be familiar with the make-up of the FFA Program of Activities and serve as a committee member on at least 3 major activities throughout the semester</p>			
<p><b>IV. METHODS OF EVALUATION</b></p> <p>a. Lectures, Testing, Class Participation, Labs, and Homework</p> <p>i. Students will be given objective tests on a regular basis. These will require students to retain, interpret, and apply ideas and information taught in each unit.</p> <p>ii. Students will be assigned regular laboratory exercises. These will reinforce ideas and information conveyed by the instructor to the students.</p> <p>iii. Students will be given quizzes and will utilize problem-solving methods</p>			

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<ul style="list-style-type: none"> <li>iv. Students will be given a comprehensive written final examination at the end of the semester to include a lab practicum portion</li> <li>v. The students will be responsible for extensive reading in the textbook and completing a variety of assignments as determined by instructor</li> <li>vi. Students will do extensive outside work preparing animal pens, working with animals, animals and facilities on a weekly basis. A weekly participation score for these activities will be given. If the student does not do the work assigned outside they will not receive credit.</li> <li>vii. Students are responsible for bringing a covered textbook, paper, pen, and pencil with them every day to class. Students will be awarded 5 points per day for coming to class prepared, failure to bring materials to class will result in losing these points. In addition, students will lose these points if their absences are unexcused, or tardy.</li> <li>viii. Students will be responsible for having their school agenda's with them on a daily basis. Students will write down the days assignments/homework every day from the board before class begins a score of 5 points a day will be given for agenda's</li> <li>ix. Weekly class participation points will be earned by the student.</li> </ul>			
<p>V. PROJECTS (all standards)</p> <ul style="list-style-type: none"> <li>a. The student will be responsible for several assignments throughout each semester. Some of these will include:                             <ul style="list-style-type: none"> <li>i. Fetal Lamb, and Horse dissection, Necropsy on Pig, Lambs, and Cattle, various tasks such as shots, temp., hoof trimming, stitches, ear tagging.</li> <li>ii. Term paper</li> <li>iii. Leadership Projects</li> <li>iv. In depth laboratory science investigations in the classroom</li> <li>v. Outdoor Ag. Science Lab activities</li> <li>vi. SAE project</li> </ul> </li> </ul>			
<p>VI. FFA PARTICIPATION</p> <ul style="list-style-type: none"> <li>a. A. Each student enrolled in Agricultural course is automatically a member of the Imperial FFA Chapter. Because the state provides funding for this Agriculture course, all students are required to participate in a minimum of 6 FFA activities every semester. Extra credit will be awarded for each additional activity beyond the</li> </ul>			

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minimum			
<b>TOTAL</b>			

**Cross-Cutting Anchor Standards and Related Common Core Standards** - Detailed version for each Industry Sector available at link on IVROP web page.

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| <ol style="list-style-type: none"> <li>1. Academics (Analyze and apply appropriate academic standards for industry sector).</li> <li>2. Communications (Acquire and accurately use sector terminology and protocols at the career and college readiness level for communicating effectively...)</li> <li>3. Career Planning and Management (Integrate multiple sources of career information from diverse formats to make informed career decisions...)</li> <li>4. Technology (Use existing and emerging technology to investigate, research, and produce products and services...)</li> <li>5. Problem Solving and Critical Thinking (Conduct short and sustained research to create alternative solutions to solve a problem using critical &amp; creative thinking...)</li> <li>6. Health and Safety (Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms...)</li> <li>7. Responsibility and Flexibility (Initiate/participate in a range of collaborations demonstrating behaviors that reflect personal and professional responsibility &amp; flexibility)</li> <li>8. Ethics and Legal Responsibilities (Practice professional, ethical, and legal behavior, responding thoughtfully...)</li> <li>9. Leadership and Teamwork (Work with peers to promote divergent and creative perspectives, leadership, group dynamics...)</li> <li>10. Technical knowledge and Skills (Apply essential technical knowledge and skills...)</li> <li>11. Demonstration and Application (Demonstrate and apply the Knowledge and skills contained in the Industry anchor and pathway standards in classroom, laboratory, and workplace settings and through CTSO's career and technical student organizations).</li> </ol> | <p><i>See Matrix for Pathway</i><br/> <i>LS 9-10, 11-12.6</i><br/> <i>SLS 11-12.2</i><br/> <i>WS 11-12.6</i><br/> <i>WS 11-12.7</i><br/> <i>RSTS 9-10, 11-12.4</i><br/> <i>SLS9-10, 11-12.1</i><br/> <i>SLS 11-12.1d</i><br/> <i>SLS 11-12.b1</i><br/> <i>WS 11-12.6</i></p> |
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