COURSE #: Zool 4181
COURSE TITLE: Vertebrate Physiology Methods Laboratory
CREDIT HOURS: 1 hour
TERM: Spring 2014
COURSE MEETINGS & LOCATION: Laboratory sections meet in the Biology Building, Room # 311
PREREQUISITE COURSES: Chem 1408 and Biol 1306-1108

Laboratory Coordinator: Dr. Zaineb Al-Dahwi
Office: Biology 104
Phone: 747-8762
Email: zaineb@utep.edu
Office hours: Mondays, Wednesdays, and Fridays: 12:00 pm – 1:00 pm or by Appointment

COURSE OBJECTIVES
The main objectives of this course are for the student to become well acquainted with the techniques used in studying vertebrate physiological aspects emphasizing nerve action and movement, endocrinology, cardio-physiology, respiration, and renal physiology.

LABORATORY REQUIREMENTS, EVALUATION, AND LABORATORY REGULATIONS:

REQUIRED LAB MATERIAL:
1. Lab Tutor Experiments Booklet available at Copy Mine in the first floor of the UTEP LIBRARY
2. Required Lab Kit: STUDENT RESPIRATORY KIT (Mouth Piece, Nose Clip, and Filter) available at UTEP BOOKSTORE. Each GROUP Should Purchase ONE Respiratory Kit.
3. Lab coat and goggles should be used during dissection exercises in the laboratory

EVALUATION:
Grades will be based on attendance, quizzes, lab reports, group assignments, and final exam.
Grade Distribution:
Attendance and Participation 10%
Lab Reports (from Lab Tutor Experiment Booklet) 20%
Quizzes 30%
Research Report 20%
Final Exam 20%
The lowest QUIZ grade will be dropped in calculating the final lab average.

The Final Lab Grade will be assigned based on the following grading scale:
A=90-100%  B=80-89%  C=70-79%  D=60-69%  F=59-0%

Grades Disputes: All grade disputes must be brought to the attention of the lab teaching assistant within one week of grade assignment. All grade disputes must be settled by May 8, 2014.
Grade disputes unresolved by the Teaching Assistant must be discussed with the Lab coordinator, Dr. Zaineb Al-Dahwi.

Attendance, Quizzes, Make-up Quizzes, and Lab Reports:
Full credit for class participation requires no absences and active contribution to all lab work and assignments. Absences will be excused only for official university activities. The student should notify the lab teaching assistant in advance about his/her participation in an official university activity.
There will be a quiz every two weeks starting the week of MONDAY FEBRUARY 17th, 2014. The quiz (taken by individual students) will cover the previous two weeks material and will be given in the first 20 minutes of the lab.
No make-up quiz will be given to any quiz during the semester. If a quiz is missed, the grade of the missed quiz will be considered the lowest and will be the quiz grade that will be dropped in calculating the final lab grade.
If a student misses more than one quiz, the student should contact the lab coordinator, Dr. Zaineb Al-Dahwi.
Lab reports are part of the lab grade evaluation. The lab report for each exercise is due in the first 30 minutes of the following lab period.

LABORATORY REGULATIONS:
All cell phones and communication devices must be turned off at all times. Taking pictures by any means in the lab is strictly forbidden and is grounds for administrative expulsion from the course.
No food or drinks are allowed in the laboratory. Open-toed shoes and flip flops are strictly prohibited while working in UTEP laboratories.
Lab coats and goggles are required during dissection exercises.

ACCOMMODATIONS AND SUPPORT SERVICES:
If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by e-mail to cass@utep.edu, or visit their office located at the UTEP Union East, Room 106. For additional information,
please visit the CASS website at www.utep.edu/CASS. **CASS staff are the only individuals who can validate and if need be, authorize accommodations for students with disabilities**

**MILITARY STUDENTS:** If you are a military student with the potential of missing classes and/or exams due to military duties, you need to contact the lab instructor as soon as possible and provide documents indicating the reason for your absence.

**LAB INSTRUCTOR CONTACT INFORMATION:**
Name:
E-mail address:

**LAB SCHEDULE:**

<table>
<thead>
<tr>
<th>Lab</th>
<th>Week of</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan. 27</td>
<td>Introduction and Lab Safety</td>
</tr>
<tr>
<td>2</td>
<td>Feb. 3</td>
<td>Cell Transport Mechanisms and Permeability: Physio-EX</td>
</tr>
<tr>
<td>3</td>
<td>Feb. 10</td>
<td>Endocrine System Physiology: Physio-EX</td>
</tr>
<tr>
<td>4</td>
<td>Feb. 17</td>
<td>Cell Transport Mechanisms and Permeability: Lab Experiment</td>
</tr>
<tr>
<td>5</td>
<td>Feb. 24</td>
<td>Reflexes and Reaction Times: Lab Tutor Experiment</td>
</tr>
<tr>
<td>6</td>
<td>Mar. 3</td>
<td>Earthworm Nerve Action Potentials: Lab Tutor Experiment</td>
</tr>
<tr>
<td>7</td>
<td>Mar. 10</td>
<td>Spring Break (No Classes)</td>
</tr>
<tr>
<td>8</td>
<td>Mar. 17</td>
<td>Sensory Physiology: Lab Tutor Experiment and “How to read a research paper”</td>
</tr>
<tr>
<td>9</td>
<td>Mar. 24</td>
<td>Gross Anatomy of the Brain and Cranial Nerves: Sheep Brain Dissection</td>
</tr>
<tr>
<td>10</td>
<td>Mar. 31</td>
<td>EEG: Lab Tutor Experiment</td>
</tr>
<tr>
<td>11</td>
<td>Apr. 7</td>
<td>EMG: Lab Tutor Experiment</td>
</tr>
<tr>
<td>Date</td>
<td>Day</td>
<td>Event Description</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>12 Apr. 14</td>
<td></td>
<td>ECG and Heart Sounds: Lab Tutor Experiment</td>
</tr>
<tr>
<td>13 Apr. 21</td>
<td></td>
<td>Respiratory Air Flow and Volume: Lab Tutor Experiment and Research Report</td>
</tr>
<tr>
<td>14 Apr. 28</td>
<td></td>
<td>Urine Analysis Experiment and Renal System Physiology: Physio-EX</td>
</tr>
<tr>
<td>15 May 5</td>
<td></td>
<td>Final Exam</td>
</tr>
</tbody>
</table>

**Important Dates:**

March 31st, 2014: Cesar Chavez Day (No Classes)
April 5th, 2014: Course Drop Deadline: **Last day to drop the lab with automatic “W”**
April 18th, 2014: Spring Study Day/Good Friday (No Classes)
May 9th, 2014: Dead Day (No Classes)