Animal Physiology
Course Syllabus

General Course Information:

Instructors: Philip Washbourne pwash@uoneuro.uoregon.edu
Lisa Wagner lwagner8@uoregon.edu

GEs: Molly Shallow mshallow@uoregon.edu
Nick Sattler nsattler@uoregon.edu

Office Hours: Phil: by Zoom 11-12pm, Thursdays
passcode Henle
Lisa: Hue 130 12 - 1pm, Mondays
Molly: by Zoom 9 - 9:50am, Fridays
Nick: by Zoom 10 - 10:50am, Thursdays
other times available by appointment

Classes: Lectures: by Zoom, 8:30 - 9:50, Tuesdays and
Thursdays, passcode pronghorn
Labs: Section 1 10 - 11:20, Mondays; 10 - 12:50,
Wednesday
Section 2 2 - 3:20, Mondays; 2 - 4:50,
Wednesday

Textbook: Randall, Burggren, French; Animal Physiology, 5th Edition
(available at the library)

Prerequisites: BI214 or BI253
Course Description:

This course will provide an introduction to physiological mechanisms and principles across the animal kingdom. Although many animals face similar challenges, such as providing a stable pH and ion concentration for their tissues, providing energy and oxygen, sensing their environment, they have evolved different ways of tackling these challenges.

Expected Learning Outcomes:

1) A broad-based knowledge of physiology at molecular, cellular, organ and organismal levels in various phyla.

2) An awareness of biological diversity and an awareness that the same physiological problems have been solved in a variety of ways by different organisms.

3) An understanding of the process and application of scientific inquiry.

4) An ability to apply mathematical or statistical approaches to understanding biological information; and an ability to interpret graphical representations of biological information.

5) An ability to communicate scientific ideas clearly in writing.

Estimated Student Workload:

This course consists of a lecture portion (2 1.5hr lectures per week) and a lab portion (2 3hr labs per week). There will be a total of 20 lectures and 16 lab sessions.

You will be expected to prepare for lectures by reading assigned chapters (or pages of chapters) and by completing short quizzes in Canvas. You will be expected to prepare for labs by reading the lab protocols in detail before attending the lab.

There will be 3 exams, two midterms and one final, with the material pertaining to the lecture portion of the class. All 3 exams will be based on multiple choice and short answer questions. Only one of the two midterm exams will contribute to your grade.

You will write multiple assignments based on the lab sessions. There will be a final project that students will design, perform, analyze, present and write about. For more details see lab syllabus.

How Grades will be determined:

Grades for BI356 will be based upon lecture and lab using the following proportions:

Lecture 1: 16 reading tests (10%)
Lecture 2: two midterms (20%)
Lecture 3: final exam (20%)
Lab section: (50%)

Course Policies:

Plagiarism: The written exams, lab reports, assignments, proposals must be your own work. Although working in a group is encouraged for the lab assignments, it is important to be able to formulate the group thoughts in your own words. Plagiarism will not be tolerated and 0 points will be awarded for that piece of coursework.

Lab Syllabus

Schedule: