

Zoology 511
Comparative Physiology
Fall, 1999

Instructor: Dr. Ann M. Findley
Office: CNSB 327
Telephone: 342-1817
Office Hours: As posted, or anytime by appointment

Objectives: To present a broad overview of physiological processes as they exist in a wide range of microbial, invertebrate and vertebrate animal systems. Emphasis will be placed on the different adaptations by which diverse organisms perform basic life functions. Comparisons will be designed to demonstrate physiological homologies and analogies.

Textbook: Required reading assignments will be given throughout the semester. Detailed outlines/summaries of each topic covered will be available online at the ULM library website (electronic reserves services).
General references include:

COMPARATIVE ANIMAL PHYSIOLOGY, 4th ed., C. Ladd Prosser, ed.
I – *Neural & Integrative Animal Physiology*; II – *Environmental & Metabolic Animal Physiology*

COMPARATIVE ANIMAL PHYSIOLOGY, Phillip C. Withers, Saunders.

Grading: Since this is a graduate course in physiology, I assume a certain level of preparation and participation from all students during each class meeting. You will get as much out of this course as you invest in it. Grades will be assigned according to your performance in the following areas:

Summary statements: Synopsis of how a particular organism or group of organisms successfully meet an environmental challenge to maintain homeostasis. (40%)

Take-home examinations: Citing relevant literature, compare and contrast how different groups of organisms respond to similar physiological challenges to successfully compete in their environment. (40%)

Class participation: Evidence of preparation for and significant contribution to class discussions of physiological adaptations evidenced in diverse organisms. (20%)

Final grades will be assigned according to the following scale:

90% + = A; 80 – 89% = B; 70 – 79% = C; 60 – 69% = D; 0 – 59% = F

Attendance: Attendance regulations, as per the current university catalog, will be followed. Attendance records will be kept for each lecture period of this course. It is the student's responsibility to obtain material presented during any missed lectures.