BIO 475 – Supervised Practicum in Advanced Biology
Spring 2020

Dr. Matthew Kwiatkowski
E-mail: kwiatkowm@sfasu.edu
Office: S241
Phone: 468-5986

Office Hours: MW 9:30 – 10:30 am, T 9:30 – 11:30 am, Th 1:30 – 2:30 pm, or by appointment.

Text and Materials: None

Course Requirements: 
Lab/field participation: 3 hours per week per credit hour
Research summary due 6 May 2020

Course Description:
Independent investigation into natural and anthropogenic forces that may shape visual signals in reptiles and acoustic signals in amphibians.

Student Learning Outcomes:
Students who complete Special Problems will be able to:
1. Learn techniques for measuring acoustic signals in anurans.
2. Learn techniques for measuring ambient noise and light levels.
3. Test hypotheses regarding predation effects on snake coloration using models (PLO 1, 4).
4. Give oral reports on a weekly basis in lab meetings (PLO 2).
5. Write a summary of the project that includes an introduction, methods, results, conclusions, and literature cited section (PLO 1, 5). Due 6 May 2020.
6. Meet all other deadlines agreed upon by the student and advisor(s) during project planning and execution.

Program Learning Outcomes:
Each of the student learning outcomes listed above address the Biology Department Program Learning Outcomes as follows:
1. Demonstrate a good knowledge base in biological concepts and be able to integrate knowledge with critical thinking skills to become problem solvers. Knowledge base will include: levels of complexity (molecular/cellular through population/communities/ecosystems); biological principles and processes.
2. Clearly articulate scientific information in oral form. Provide clear structure and transitions; demonstrate audience-appropriate purpose, agenda, language and style.
3. Be able to design, carry out and analyze experiments to answer biological questions, including: scientific methods and instrumentation; safe and appropriate use of laboratory equipment; experimental design; data analysis; and familiarity with professional standards in science.
4. Career building, demonstrate preparation for future career and educational goals utilizing the knowledge and training during their academic program by: awareness of personal competencies (strengths and weaknesses) and an understanding of professional and ethical behavior.
Research
Each student should participate in the following

- learn techniques by assisting with data collection for the following:
  - recording frog calls for various species in east Texas
  - recording frog body temperature
  - quantifying noise and light levels at sites around east Texas
- mark and release techniques of east Texas frogs
- test hypotheses about predation on snake color using clay models
  - construct models with either copperhead, coral snake, or neutral colors
  - collect data on predator response to model colors
  - compile, analyze, and interpret data
  - summarize research in a report (see next section) due at the end of the semester

Research Summary:
The research summary is due no later than 6 May 2020 at 5:00 p.m. This document should summarize the context and background for the study, the data you collected, the methods that you learned as a result of your experience in the lab and field throughout the semester, and your conclusions. It should also include how this knowledge will apply to your career in the future.

Course Evaluation:
All students are required to complete a course evaluation at the end of the semester.

Academic Integrity:
Academic Integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty. Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations on an assigned exercise; and/or (3) helping or attempting to help another in the act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

ANY act of academic dishonesty will result in receiving a grade of F for the course and will be reported to the student’s dean.

Withheld Grades Semester Grades Policy:
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically become an F and will be counted as a repeated course for the purpose
of computing the grade point average. The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with disabilities:**
To obtain disability related accommodations and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, Room 325, 468-3004/468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided.