

# **Course Description**

# ZOO1010L | Zoology Laboratory | 1.00 credit

Laboratory for ZOO1010. Corequisite ZOO1010.

**Competency 1:** The student will demonstrate proficiency in data collection by:

- 1. Collecting and recording accurate and detailed observations of animal behavior during laboratory experiments
- 2. Gathering and organizing quantitative and qualitative data using appropriate tools and techniques
- 3. Identifying and selecting relevant data points to support scientific hypotheses and conclusions

### **Competency 2:** The student will exhibit competence in data analysis by:

- 1. Applying statistical methods to analyze and interpret collected data, such as calculating averages, standard deviations, and correlations
- 2. Using appropriate software or tools to create visual representations, such as graphs or charts, to illustrate patterns and trends in the data
- 3. Drawing logical conclusions and inferences based on the analyzed data, linking them to the underlying biological concepts

# **Competency 3:** The student will develop proficiency in scientific reasoning by:

- 1. Formulating testable hypotheses based on prior knowledge and observations
- 2. Designing controlled experiments to explore the cause-and-effect relationships between variables
- 3. Evaluating and critically analyzing scientific literature, identifying strengths and weaknesses in experimental design and methodology

# **Learning Outcomes:**

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information

Updated: Fall 2025