General Course Information

Course Name: Zoology	
Department: Science	Grade Level(s) 11-12
Duration/Credits: 1 Semester ½ credit	Prerequisites: Successful completion of Biology
BOE Approval Date:December 2022	Course Code: H3210

Course Description:

This course surveys the animal kingdom from a comparative perspective. The diversity and adaptation of animals will be studied with an emphasis on the functional anatomy and physiology of each group. Students will then compare advances in lower life forms, to better understand specific human physiology. Lastly, students will analyze how interactions in the ecosystem (human impact and natural selection) affect speciation.

Course Rationale:

More and more animal species are becoming extinct every year. Getting students interested about animal adaptation and physiology can mitigate their loss as we learn to manage Earth's resources and understand the need for diversity.

Course Objectives:

- 1. Students will demonstrate knowledge of the structure/function of certain phyla.
- 2. Students will discuss and compare systems of certain phyla as it relates to specific human systems.
- 3. Students will analyze data based on research topics and draw conclusions from the data.
- 4. Students will read and analyze a variety of research topics, culminating in formal presentations.
- 5. Students will develop animal models based on assigned topics.

Standards Alignment:

- <u>9-12.LS1.A.2</u> Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- <u>9-12.LS1.A.3</u> Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.