JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Zoology

Course Abbreviation and Number: BIO 2660 **Credit Hours:** 4 **Course Type:** Lecture/Lab

Course Description: In this introduction to the animal kingdom, students will be asked to identify and understand animal morphology, development, behavior, relationships with the environment, and the evolutionary history of numerous phyla and classes of animals. This course explains what animals are, what they do, and how they came to be. One or more field trips will be included.

Prerequisite: ENG 1510 and BIO 1551+BIO 1552 or BIO 1570 or BIO 1580.

General Education Requirements Met

SUNY	JCC
Natural Sciences	Scientific Reasoning

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Identify and compare animal morphologies
2. Identify and compare developmental pathways
3. Utilize scientific classification, organization, and taxonomic nomenclature
4. Explain the principle of evolution and its application to the evolutionary history of numerous phyla and classes of animals
5. Identify environmental influences on animal survival, reproduction, and evolutionary pathways
6. Apply a basic knowledge of the evolution of animal behaviors
7. Demonstrate an understanding of the methods scientists use to explore natural phenomena, including observation, hypotheses development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or mathematical modeling. [SUNY Gen Ed – Natural Sciences]
8. Application of scientific data, concepts, and models in one of the natural sciences. [SUNY Gen Ed – Natural Sciences]

Topics Covered:

- Zoology: An Evolutionary and Ecological Perspective
- Evolution: History and Evidence
- Animal Classification, Phylogeny, and Organization
- Animal-like Protists: The Protozoa
- Multicellular and Tissue Levels of Organization
- The Triploblastic, Acoelomate Body Plan (Phylum Platyhelminthes)
- The Pseudocoelomate Body Plan: Aschelminthes
- Molluscan Success
- Annelida: The Metameric Body Form
- The Arthropods: Blueprint for Success
- The Echinoderms
- Hemichordata and Invertebrate Chordates
- The Fishes: Vertebrate Success in Water
- Amphibians: The First Terrestrial Vertebrates
- Reptiles: The First Amniotes
- Birds: Reptiles by Another Name
- Mammals: Specialized Teeth, Hair, Endothermy, and Viviparity
- Form and Function: A Comparative Perspective

Information for Students

- Expectations of Students
  - Civility Statement
  - Student Responsibility Statement
  - Academic Integrity Statement
- Accessibility Services
  Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.

- Get Help: JCC & Community Resources
- Emergency Closing Procedures
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0

- Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2023