

COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Diversity of Organisms
COURSE NUMBER	BIOL-0225
DIVISION	Math, Science, Business & Technology
DEPARTMENT	Biology
CIP CODE	24.0101
CREDIT HOURS	5
CONTACT HOURS/WEEK	Class: 3 Lab: 4
PREREQUISITES	BIOL0121, General Biology, or BIOL0135, Cell and Molecular Biology
COURSE PLACEMENT	Students must meet the correct placement measure for this course. Information may be found at: https://www.kckcc.edu/admissions/information/mandatory-evaluation-placement.html

COURSE DESCRIPTION

This course, for biology majors, is a whole-organism approach to the evolution and diversity of life. Emphasis is placed upon structure/function relationships, phylogenetics and the roles of organisms within their ecosystems. This course includes both lecture and laboratory components.

KANSAS SYSTEMWIDE TRANSFER: BIO 1030

The learning outcomes and competencies detailed in this course outline or syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents.

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- I. History of Life
- II. Evolution and Speciation
- III. Introduction to Systematics
- IV. The Prokaryotes: Bacteria and Archaea

- V. Diversity of Protista
- VI. Diversity of Plants
- VII. The Fungi
- VIII. Diversity of Animals - Invertebrates
- IX. Diversity of Animals - Vertebrates

COURSE LEARNING OUTCOMES

Upon successful completion of this course, the student will:

- A. The student will summarize and explain the processes and mechanisms of evolution.
- B. The student will interpret organismal diversity using phylogenetic hypotheses.
- C. The student will relate structure to function in organisms.
- D. The student will explain how organisms interact with their environments.
- E. The student will design and perform experiments incorporating organisms in a laboratory setting.
 - 1. The student will develop observational skills from the microscopic to the macroscopic and ecological levels.
 - 2. The student will apply quantitative measurement skills incorporating the metric system.
 - 3. The student will interpret and communicate data using appropriate analytical and statistical skills.

ASSESSMENT OF COURSE LEARNING OUTCOMES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.