

COURSE SYLLABUS

LAST REVIEW	Fall 2022
COURSE TITLE	Environmental Science
COURSE NUMBER	BIOL-0131
DIVISION	Math, Science, Business & Technology
DEPARTMENT	Biology
CIP CODE	24.0101
CREDIT HOURS	3
CONTACT HOURS/WEEK	Class: 3
PREREQUISITES	None
COURSE PLACEMENT	None

COURSE DESCRIPTION

Environmental Science is the study of the interrelationship of humans with the environment. Students will learn the basic rules that govern the natural world, the products and services provided by the environment and the effects humans have on their environment. The guiding principle for this course is sustainability which advocates environmental stewardship while promoting economic prosperity and social justice.

KANSAS SYSTEMWIDE TRANSFER: BIO 1041

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.

General Education Learning Outcome

- ☐ Basic Skills for Communication
- ☐ Mathematics
- ☐ Humanities
- ☒ Natural and Physical Sciences
- ☐ Social and Behavioral Sciences

Institutional Learning Outcomes

- ☒ Communication
- ☒ Computation and Financial Literacy
- ☒ Critical Reasoning
- ☐ Technology and Information Literacy
- ☐ Community and Civic Responsibility
- ☐ Personal and Interpersonal Skills

TEXTBOOKS

<http://kckccbookstore.com/>

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. Understanding our environment
- II. Tools for building a better world
- III. Matter, energy and life
- IV. Biological communities and species interactions
- V. Biomes, landscapes, restoration and management
- VI. Population dynamics
- VII. Environmental health and toxicity
- VIII. Food, hunger and nutrition
- IX. Soil resources and sustainable agriculture
- X. Pest control
- XI. Biodiversity
- XII. The earth and its crustal resources
- XIII. Air, climate and water
- XIV. Air pollution
- XV. Water use and management
- XVI. Water pollution
- XVII. Conventional energy
- XVIII. Sustainable energy
- XIX. Solid, toxic and hazardous waste
- XX. Urbanization and sustainable cities

COURSE LEARNING OUTCOMES

Upon completion of this course, students will be able to:

- A. Utilize scientific inquiry to make data-informed decisions.
- B. Explain physical and biological processes that shape the earth.
- C. Evaluate interconnections between organisms and the environment.
- D. Examine human interactions and impacts on the environment and natural resources.
- E. Discuss policies, ethics, and economics in environmental decision making.
- F. Propose components of a sustainable future.

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>.