RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE

ENVI 101: ENVIRONMENTAL STUDIES

I. Basic Course Information

A. Course Number and Title: ENVI 101: Environmental Studies

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2024

D. Effective Term: Fall 2025

E. Sponsoring Department: Science & Engineering

F. Semester Credit Hours**:** 3

G. Weekly Contact Hours**:** 3

Lecture**:** 3
Laboratory**:** 0
Out of class student work per week: 6

H. ☐ Prerequisite (s): None
☐ Corequisite (s): None

I. Additional Fees**:** None

II. Catalog Description

Prerequisites: None.
This course is an introduction to environmental studies. Students will explore current topics to understand the causes and consequences of environmental problems facing the world and efforts being made to address them. Students will apply scientific methods and technological tools to analyze and evaluate how these environmental concerns relate to their own lives from both global and local perspectives. One weekend field trip may be required. Students cannot receive credit for both ENVI 101 and ENVI 102. This course may be used to fulfill one semester of a non-laboratory science requirement for non-science majors or as an elective for science majors.

III. Statement of Course Need

A. This course is a comprehensive introduction to understanding the environment and the effects of human activities on it. In the general absence of basic environmental curricula in the public education system, this is the first course that many students are taking on this subject. By covering a wide array of environmental issues, the course is likely to appeal to the broadest range of potential student interests. By focusing on basic aspects of human life (e.g., climate change, air and water pollution, etc.), moreover, the course is likely to be relevant and meaningful both to students engaged in formal environmental programs of study, as well as the public in general. Rather than teaching the course from the relatively narrow view of traditional environmental science concepts and methods, this course broadens the perspective to also include the various political, historical, economic, cultural and philosophical dimensions in which these issues are embedded in the real world. From this vantage, students are not only likely to get a better sense of the complexity of these issues, but of the various causes and consequences that need to be addressed in order to devise solutions to them.

B. No laboratory component is required.

C. This course generally transfers as a general education science (non-lab) course, and may transfer as an introductory core course in Environmental Science or Environmental Studies degree programs dependent on the transfer institution.

IV. Place of Course in College Curriculum

A. Free Elective
B. This course serves as a General Education Science (non-lab) course
C. This course meets the Core Environmental Science program requirement for the Environmental Science A.S. and Environmental Studies A.A.
D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

A. Introduction to Environmental Science
    a. Defining “environment”
    b. Relation to other disciplines
    c. Using online databases to access environmental data on water and air quality, toxins in consumer products, toxic waste sites, etc.
    d. Use scientific method to evaluate significance and develop solutions
B. Water Pollution
    a. The water cycle and freshwater scarcity
    b. Major categories and causes of water pollutants
    c. History of water pollution and regulation
    d. Case studies (ex. groundwater, surface water, marine debris)

C. Air Pollution
    a. Air quality and atmospheric science
    b. History of air pollution and regulation
    c. Major categories of air pollutants
    d. Transportation
    e. Case studies (ex. leaded gasoline, ozone hole)
D. Waste and Recycling
    a. Municipal waste management
    b. Hazardous waste management
    c. Case studies (ex. e-waste, Love Canal)
E. Toxins in Consumer Products and the Built Environment
    a. Major categories of contaminants
    b. Risk perception and assessment
    c. Regulation
F. Climate Change
    a. Evidence of human contributions to climate change
    b. Consequences
    c. Solutions at multiple scales
G. Sustainability
    a. Definition
    b. Voluntary simplicity
    c. Triple bottom line concept

VI. A. Course Learning Outcomes:

At the completion of the course, students will be able to:

1. Apply the scientific method to analyze environmental problems and draw conclusions from data and evidence (GE-3*)
2. Understand ethical issues and situations related to environmental problems (GE-NJ-ER)
3. Use technical resources to access, analyze, and present scientific data to answer questions about local and/or global environmental quality (GE-4*, GE-IL)
4. Evaluate and think critically about information related to the scientific, governmental, economic, social, and historical dimensions of environmental issues (GE-IL)

B. Assessment Instruments

Given the outcomes described above, the following assessment methods may be used:

1. exams
2. presentations
3. discussion questions
4. reading quizzes
5. class participation
6. analysis of data from online databases

7. essays

VII. Grade Determinants

The following may be used to determine the final grade:

A. midterm and final exam
B. textbook readings and quizzes
C. homework assignments
D. presentations

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

A. lecture/discussion
B. small-group work
C. computer-assisted instruction
D. guest speakers
E. student oral presentations
F. student collaboration
G. independent study

VIII. Texts and Materials

The following types of course materials may be used:

A. suggested textbook: Environmental Studies: From New Jersey to the Globe, by Mark Yuschak and Viveca Sulich (OER textbook: https://rvcc.pressbooks.pub/envstudies/)
B. articles from scientific journals and periodicals
C. student writing
D. films and documentaries
E. internet databases and information sources
F. library article databases

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

IX. Resources

A. RVCC van and/or bus rental;
B. Library databases and other resources;
C. Film and documentaries from the RVCC Science Library
D. Tablets/Computers for in-class internet assignments

X. Check One: ☐Honors Course ☐Honors Options ☒ N/A