

Washtenaw Community College Comprehensive Report

ENV 105 Introduction to Environment and Society Effective Term: Fall 2021

Course Cover

Division: Math, Science and Engineering Tech

Department: Physical Sciences

Discipline: Environmental Science

Course Number: 105

Org Number: 12300

Full Course Title: Introduction to Environment and Society

Transcript Title: Intro to Env and Society

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Consultation with all departments affected by this course is required.

Course description

Outcomes/Assessment

Objectives/Evaluation

Rationale: This is a three-year review and update of Master Syllabus.

Proposed Start Semester: Spring/Summer 2021

Course Description: In this course, students take an in-depth look at the relationships between individuals, societies and the environment from the perspectives of sustainability and environmental science, humanities and social science disciplines. Local to global environmental issues and topics will be presented and analyzed through a combination of lecture, readings, classroom discussions and activities.

Course Credit Hours

Variable hours: No

Credits: 3

Lecture Hours: Instructor: 45 **Student:** 45

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 45 **Student:** 45

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 2

Requisites

General Education

MACRAO

MACRAO Science & Math

General Education

EMU GenEd Diverse World

General Education Area 4 - Natural Science

Assoc in Applied Sci - Area 4

Assoc in Science - Area 4

Assoc in Arts - Area 4

Michigan Transfer Agreement - MTA

MTA Science (no lab)

Request Course Transfer

Proposed For:

Eastern Michigan University
Ferris State University
Grand Valley State University
Jackson Community College
Michigan State University
Oakland University
University of Detroit - Mercy
University of Michigan
Wayne State University
Western Michigan University
Central Michigan University

Student Learning Outcomes

1. Recognize and identify introductory environmental science principles and concepts involving the relationships between individuals, societies and the environment.

Assessment 1

Assessment Tool: Outcome-related common test questions

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Multiple-choice questions will be scored using the answer key. Essay and short answer questions will be scored using a departmentally-developed rubric.

Standard of success to be used for this assessment: 70% of the students will correctly answer 70% of the outcome-related questions.

Who will score and analyze the data: Environmental science faculty

2. Analyze and interpret data such as maps, charts, diagrams, readings and graphs using appropriate environmental science principles and concepts.

Assessment 1

Assessment Tool: Outcome-related common test questions

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Multiple-choice questions will be scored using the answer key. Essay and short answer questions will be scored using a departmentally-developed rubric.

Standard of success to be used for this assessment: 70% of the students will correctly answer 70% of the outcome-related questions.

Who will score and analyze the data: Environmental science faculty

- Write a research paper based on an environmental topic covered in this course.

Assessment 1

Assessment Tool: Research paper

Assessment Date: Fall 2023

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 70% of students will score 75% or higher.

Who will score and analyze the data: Environmental science faculty

Course Objectives

- Describe the various implications for the sustainability of environmental systems as the human population grows.
- Explain how the environmental impacts of individuals and groups differ enormously, using tools such as an ecological footprint.
- List and explain examples of economic mechanisms that exist that may help solve environmental problems, such as green taxes, markets for pollution and green consumer choices.
- Describe market failures that lead to suboptimal environmental outcomes.
- Explain the causes and effects of acid precipitation.
- Explain the tragedy of the commons and how collective agreements help to solve the prisoners' dilemma and lead to constructive environmental outcomes.
- Compare and contrast self-serving interests to collective interests as they relate to environmental issues.
- Identify various approaches to environmental preservation and conservation.
- Explain the relationships among environmental hazards, risk and risk perception.
- Describe contradictions of capitalism, overaccumulation of wealth and implications for sustainability.
- Identify discourses that shape social narratives, reinforce power dynamics and justify natural resource exploitation.
- Explain the purpose and outcome of the Montreal Protocol as it relates to the stratospheric ozone layer.
- List some of the problems associated with assessing environmental issues, such as cultural differences, socioeconomic status and politics.
- Provide examples of some of the political and economic implications relating to the human use of natural resources.
- Explain how carbon dioxide concentrations contribute to global climate change, including references to the Greenhouse Effect.
- Identify important carbon sources and carbon sinks, including plants and photosynthesis.
- Compare and contrast how living things in the past and in modern society have altered the carbon cycle.
- Explain how a cap-and-trade system differs from a traditional regulatory approach in limiting pollutant emissions.
- Define basic ecological concepts such as ecological niche and trophic levels.
- Describe the major drivers of declines in biodiversity.
- Describe the conditions before and after "dolphin safe" labeling as they relate to dolphins, tuna and green consumer campaigns.
- Describe industrial fishing practices that lead to unsustainable management of marine resources.
- Calculate maximum sustainable yield.
- Compare and contrast the various types of scarcity, including hydrological, socioeconomic and perceptual, as they relate to water shortages.
- Provide examples of possible driving forces behind the privatization of water.
- Explain the controversy surrounding biotechnology that allows us to change and create new species of food.

27. Describe examples of the processes that influence the consumption and production of foods.
28. Write a 5-6 page research paper that covers a topic related to the interactions between the environment and society.
29. Discuss the interactions and relationships among the environment, individuals and society.
30. Explain the dimensions and range of local, national and global environmental problems.
31. Analyze and explain the place of humans in ecosystems throughout history, with insights from several disciplines.
32. Identify and explore various solutions to confront environmental challenges from a variety of perspectives.
33. Explain the concept of sustainability as it relates to environmental issues.

New Resources for Course

Course Textbooks/Resources

Textbooks

Robbins,P., J. Hintz, and A. Moore. *Environment and Society*, 2 ed. Wiley-Blackwell, 2014, ISBN: 9781118451564.

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

Computer workstations/lab

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Smita Malpani</i>	<i>Faculty Preparer</i>	<i>Feb 24, 2021</i>
Department Chair/Area Director: <i>Suzanne Albach</i>	<i>Recommend Approval</i>	<i>Feb 26, 2021</i>
Dean: <i>Victor Vega</i>	<i>Recommend Approval</i>	<i>Mar 09, 2021</i>
Curriculum Committee Chair: <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Mar 23, 2021</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Mar 24, 2021</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Mar 25, 2021</i>