Tompkins Cortland Community College

Master Course Syllabus

Course Discipline and Number: ENVS 102 **Year: 2020-2021**
Course Title: Technology and the Environment **Credit Hours: 3**

Attendance Policy: *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

Services for Students with Disabilities: *It is the College's policy to provide, on an individual basis, appropriate academic adjustments for students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

Course Description

Examines the technological aspects of resource problems. Topics include air and water pollution, traditional and alternative energy sources, climate change, and management of non-renewable resources. Technical and economic constraints are considered, along with alternatives for future development. Local and global issues are addressed. Intended for all students, regardless of major field of study. ENVS 102 fulfills the SUNY General Education Natural Sciences requirement. Prerequisites: RDNG 099 if required by placement testing; prior completion or concurrent enrollment in ENGL 100 or ESL 120, 121, and 122 (or prior completion of ESL 103). 3 Cr. (3 Lec.) Spring semester.

Course Context/Audience

ENVS 102 allows students to fulfill TC3 General Education Critical Thinking and Social/Global Awareness goals. This course does not fulfill any SUNY General Education requirements. Environmental Studies majors are required to take ENVS 102. ENVS 295 requires that the student first take either ENVS 101 or ENVS 102.

Basic Skills/Entry Level Expectations

Writing: WC College level writing skills are required. See course co-requisites or pre-requisites.

Math: M0 Course requires very little or no math.

Reading: R2 Before taking this course, students must have a C or better in RDNG 099 or assessment indicating that RDNG 099 was not required.

Other: Ability to interpret graphs and tables.

Course Goals

The student will become more aware of his/her environment, and how s/he can change his/her lifestyle to cause less damage to earth's systems. The class will promote a greater understanding of environmental issues.

Course Objectives/Topics

Objective/Topic	% Course
The student will be able to demonstrate excellent information literacy, critical thinking, and communication skills. These include informed discussion of controversial topics, and the ability to communicate a position on an issue to officials who can influence outcomes.	10%

The student will be able to demonstrate an understanding of how the scientific method is used to manage natural resources and environmental problems. In addition, the student will be able to demonstrate an understanding of the laws of thermodynamics and how they relate to resource issues. The student will also be able to demonstrate an understanding of other basic scientific concepts relevant to abiotic natural resources, including technology for their utilization and management.	30%
The student will be able to describe the causes of air, water, and soil pollution, and the effects of such pollution on the environment. In addition, the student will be able to demonstrate methods for managing pollution.	30%
The student will be able to demonstrate an understanding of the differences between renewable and non-renewable resources. In addition, the students will be able to demonstrate an understanding of traditional and alternative models for resource management.	30%

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	**HOW DOES THE COURSE ADDRESS THE OUTCOMES** (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
Students will be able to ➢ develop meaningful questions to address problems or issues. ➢ gather, interpret, and evaluate relevant sources of information. ➢ reach informed conclusions and solutions. ➢ consider analytically the viewpoints of self and others.	The course examines relevant contemporary issues and asks students look at multiple stakeholders and pros/cons. The course emphasizes the importance of considering possible bias in the media and focuses on evaluating sources for legitimacy. The course emphasizes the importance of considering possible bias in the media and focuses on evaluating sources for legitimacy. Emphasis is on building support for your viewpoint using disparate sources of information. Students are asked to consider how personal belief and others' viewpoints shape any given environmental issue and how it is conveyed in the media. These outcomes are addressed through class discussions; the required Letter to a Leader; mini research paper, media bias discussion, a debate, and the Green Pledge
SOCIAL/GLOBAL AWARENESS OUTCOMES	**HOW DOES THE COURSE ADDRESS THE OUTCOMES** (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
➢ Students will begin to understand how their lives are shaped by the complex world in which they live. ➢ Students will understand that their actions have social, economic and environmental consequences.	Focus is on ecological connections and how humans are a part of and apart from ecological systems. This class emphasizes the application of concepts to solutions to environmental issues. The course examines the social dimension of sustainability and focuses on why sustainable solutions must consider social context. The course emphasizes the importance of considering possible bias in the media and focuses on evaluating sources for legitimacy. Emphasis is on building support for your viewpoint using disparate sources of information. Students are asked to consider how personal belief and others' viewpoints shape any given environmental issue and how it is conveyed in the media.

	These outcomes are addressed through lectures; class discussions; presentations; a required Letter to a Leader; Ecological Footprint; a Debate; and the Green Pledge.

Instructional Methods
Lecture, discussion, case studies, debate, and media are all appropriate. Current events and the Race to Save the Planet video series will fuel much discussion.

Methods of Assessment/Evaluation

Method	% Course Grade
Exams	20-60%
Oral presentations	0-70%
Term paper or multiple smaller written assignments	0-50%
Participation in discussion	0-33%
Journal	0-33%
Projects (creative, primary research, service, etc.)	0-33%
Quizzes	0-30%

Text(s)
Living in the Environment, Miller, G.T., 12th edition, © 2002, Wadsworth Brooks/Cole Publishing.

Bibliography
Allen, J.L., Annual Editions: Environment, Latest edition: McGraw-Hill/Dushkin.

Buchholz, R.A., Marcus, A.A., and Post, J.E., et al; Managing Environmental Issues - A Casebook, Prentice Hall, Englewood Cliffs, NJ, © 1992.

Taking Sides, Case Studies, Latest edition.

Other Learning Resources

Audiovisual
Journey to Planet Earth DVD series An Inconvenient Truth Darwin's Nightmare

Electronic Please see the Environmental Studies Subject Guide on the TC3 Library web page.
Other No resources specified