Course information:
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1. Course name: Principles of Sustainability
2. Department: Sustainability
3. Number: 101
4. Cluster requirement: Human Questions and Contexts

Faculty information:
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Required components:
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8. Master syllabus:
   http://webroots/www.umassd.edu/genedchecklist/holding/sus101mastersyllabus4a-or-4c.pdf
9. Course overview statement:
   SUS 101 introduces students to basic concepts in sustainability. Students will learn the fundamental concepts, principles and practices of sustainability, explore how sustainability functions within natural and socioeconomic systems, and apply their knowledge to current problems. Material is presented through lectures, readings, and discussion. Student learning is assessed through some combination of discussions (in class and/or online), individual assignments, group reports, and/or examinations.

SUS 101 addresses both Clusters 4A and 4C of the University Studies Curriculum. SUS 101 (originally SUS 201, since renumbered) has already been approved for 4C. This application is for Cluster 4A. If approved, SUS 101 will be an “either/or” course: a student may use SUS 101 to fulfill 4A or 4C, but not both.

The Cluster 4A learning outcomes may be assessed in a variety of ways, depending upon the instructor: class and on line discussions, individual and/or individual projects and/or paper assignments, or in-class examinations.

Outcome 4A1. Explain different perspectives on: a) what it means to be human and how the significance of human existence has been understood; b) the nature of human relationships and how these relationships are evidenced in regard to the broader world; or c) how knowledge is obtained, maintained and changed, as well as how individuals come to understand and think about the world around them.

SUS 101 directly addresses a, b, and c. Understanding what it means to be human requires critical reflection upon competing perspectives on humans’ relationship to nature and to material production, consumption, and accumulation. Understanding the nature of human relationships requires critical reflection upon competing perspectives of our dependence upon, and obligations to, other humans around the globe with whom we are enmeshed in a dense web of socioeconomic and environmental interdependencies. Understanding how knowledge is obtained, maintained, and changed requires understanding of the scientific method and of the many factors that influence both expert and public understanding of the natural and socioeconomic world around us.
Outcome 4A2. Recognize ethical issues in complex contexts and evaluate the ethical positions taken by themselves and others.

Students in SUS 101 focus directly upon ethical issues in complex contexts. These issues involve both other humans and nonhuman others. What ethical obligations do affluent consumers in developed countries have toward less affluent producers in developing countries? Do other species and ecosystems have a right to survive and flourish, quite independent of the services that they might provide to humans? Do individuals have an obligation to reduce their environmental footprint, even if others do not? What obligations do people currently living have to people as yet unborn?

Outcome 4A3. Locate, analyze, summarize, paraphrase and synthesize material from a variety of sources.

SUS 101 is inherently multidisciplinary, drawing upon the natural sciences, social sciences, humanities, and the arts. Students must not only locate, analyze, summarize, and paraphrase material from diverse sources and disciplines, but they must also synthesize them in the consideration of complex issues such as biodiversity conservation, economic globalization, and climate change, issues that require a simultaneous application of scientific, economic, ethical, and aesthetic evaluation.

Outcome 4A4. Evaluate arguments made in support of different perspectives on human questions and contexts.

Students in SUS 101 evaluate arguments made in support of different perspectives both across disciplines and within them. For example, in order to reach a position on climate policy, one must not only understand the dimensions of current scientific consensus and uncertainty, but also understand competing perspectives within other disciplines such as ethics, sociology, political theory, and economics—and one must be able to distinguish between different types of arguments when they appear together in one document or message.

10. Signed faculty and chair sponsor sheet: sent separately.
11. Official course catalog description for the course: Fundamental principles of Sustainability. Goal is to provide a larger context for topics covered in sustainability courses. Topics covered include: What is Sustainability?, Climate Change and Environmental Challenges, systems Thinking/Systems Analysis, “Natural” Systems and Function, Human Interactions with Natural Systems, Ethics, and Values.
12. Course approval form: not entered.
Master Syllabus
Course: SUS 101 Principles of Sustainability

Cluster Requirement: 4A, Human Questions and Contexts
OR
Cluster Requirement: 4C, The Nature of the Global Society

This University Studies Master Syllabus serves as a guide and standard for all instructors teaching an approved in the University Studies program. Individual instructors have full academic freedom in teaching their courses, but as a condition of course approval, agree to focus on the outcomes listed below, to cover the identified material, to use these or comparable assignments as part of the course work, and to make available the agreed-upon artifacts for assessment of learning outcomes.

Course Overview:

SUS 101 introduces students to basic concepts in sustainability. Students will learn the fundamental concepts, principles and practices of sustainability, explore how sustainability functions within natural and socioeconomic systems, and apply their knowledge to current problems. Material is presented through lectures, readings, and discussion. Student learning is assessed through some combination of discussions (in class and/or online), individual assignments, group reports, and/or examinations.

Learning Outcomes:

Course-Specific Learning Outcomes:
After completing the course, students will be able to:
1. Identify and critically assess the fundamental concepts, principles, and practices of sustainability.
2. Identify the causes of, and evaluate solutions to, unsustainable social and economic practices around the world.
3. Identify and critically assess the ethical and value conflicts that arise in debates over (un)sustainable social and economic practices around the world.
4. Identify and critically assess alternative perspectives and arguments about the relationship between humans and the natural environment.

University Studies Learning Outcomes:
This course may be used to fulfill University Studies Cluster 4A, Human Questions and Contexts, OR University Studies Cluster 4C, The Nature of Global Society. It will not fulfill both for the same student.

Cluster 4A, Human Questions and Contexts
After completing this course, students will be able to:

1. Explain different perspectives on: a) what it means to be human and how the significance of human existence has been understood; b) the nature of human relationships and how these relationships are evidenced in regard to the broader world; or c) how knowledge is obtained, maintained and changed, as well as how individuals come to understand and think about the world around them.
2. Recognize ethical issues in complex contexts and evaluate the ethical positions taken by themselves and others.
3. Locate, analyze, summarize, paraphrase and synthesize material from a variety of sources.
4. Evaluate arguments made in support of different perspectives on human questions and contexts.

**Cluster 4C, The Nature of the Global Society.** After completing this course, students will be able to:

1. Explain basic problems faced by societies and cultures outside the US or issues that shape societies globally.
2. Locate, analyze, summarize, paraphrase and synthesize material from a variety of sources.
3. Evaluate arguments made in support of different perspectives on global society.

**Examples of Texts and/or Assigned Readings:**

*a. Texts:*


Jeffrey D. Sachs, *The Age of Sustainable Development* (Columbia UP, 2015)

*b. Articles:*


Example Assignments: Cluster 4A

The Cluster 4A learning outcomes may be assessed in a variety of ways, depending upon the instructor: class and on line discussions, individual and/or individual projects and/or paper assignments, or in-class examinations.

**Outcome 1.** Explain different perspectives on:

a) what it means to be human and how the significance of human existence has been understood;

*Test question:* In what ways do cultural “world views” enhance or endanger societal sustainability?

b) the nature of human relationships and how these relationships are evidenced in regard to the broader world;

*Test question:* In what ways does the concept of “The Tragedy of the Commons” explain threats to societal cohesion?

c) how knowledge is obtained, maintained and changed, as well as how individuals come to understand and think about the world around them.

*Essay assignment:* What are the fundamental challenges to societal sustainability, as evidenced by collapse and survival?

**Outcome 2.** Recognize ethical issues in complex contexts and evaluate the ethical positions taken by themselves and others.

*Test question:* In what ways does the concept of “The Tragedy of the Commons” explain threats to societal cohesion?

**Outcome 3.** Locate, analyze, summarize, paraphrase and synthesize material from a variety of sources

*Group project:* Co-write a sustainability report/audit that identifies what key sustainability lessons can be derived for today’s US national policy makers from global historical examples

**Outcome 4.** Evaluate arguments made in support of different perspectives on human questions and contexts.

*Group project:* Co-write a sustainability report/audit that identifies what key sustainability lessons can be derived for today’s US national policy makers from global historical examples
Example Assignments: Cluster 4C

The Cluster 4A learning outcomes may be assessed in a variety of ways, depending upon the instructor: class and online discussions, individual and/or individual projects and/or paper assignments, or in-class examinations.

**Outcome 1.** Explain basic problems faced by societies and cultures outside the US or issues that shape societies globally

*Test question:* In what substantial ways has the concept of “sustainability” evolved since the Report of the Club of Rome in 1970?

**Outcome 2.** Locate, analyze, summarize, paraphrase and synthesize material from a variety of sources

*Group project:* Co-write a sustainability report/audit that critically evaluates the strategic sustainability options for an agreed community or enterprise

**Outcome 3.** Evaluate arguments made in support of different perspectives on global society

*Essay question:* What impact has the concept of “sustainable development” had on orthodox economic thinking?

**Sample Course Outline**

Note: A vast range of topics are covered in introductory survey courses in sustainability, and no single instructor can cover all of them. This particular list and sequence of topics is purely illustrative.

1) Defining Sustainability
2) Sustainable Development and the “Limits to Growth” Debate
3) Systems Thinking
4) Consumerism, Consumption, Commodity Chains, and Ecological Footprints
5) Individual Liberty, Property Rights, & the Tragedy of the Commons
6) Ecosystem Services & Externalized Costs
8) Valuing People: International and Intergenerational Ethics
9) Global Poverty & Inequality
10) Global Climate Change
11) Population & Food
12) Environment & Violent Conflict
13) Measuring Sustainability: Indicators and Certifications
14) Sustainable Capitalism and its Critics
15) Sustainable Building & Urban Design
16) Alternative Energy
17) Sustainability & Personal Responsibility
18) Sustainability at UMass Dartmouth