# Segment 3: What is a Sustainable World? (3 credits)

**PURPOSE OF THE COURSE:** Sustainability is a concept at the crossroads of how we think about resilient ecosystems and economies, and just and inclusive societies. It is a moral concept that upholds the value of conserving—rather than exhausting—the balance of energies that allows these things to exist together and thrive. This course is an introduction to sustainability based on areas of research, social movements, and the practices that make it lived. We will read and think about practices, about the theory of tacit knowledge by which the hands teach the head, and then turn to practicing some skills that will actually give our hands a chance to teach our heads ways to live more sustainably.

# AIMS OF THE COURSE

- Encounter and understand key principles and conceptual tools of sustainability, including IPAT, full-cost accounting, the precautionary principle, and systems thinking
- Become familiar with innovations in energy, food, architecture, and land use that are currently being practiced and show promising results for increasing the resilience of the planet
- Gain an understanding of the idea of tacit knowledge and how it intersects with sustainable practices
- Become conversant with the sustainability spectrum: from institutional policies and macro-economics to personal lifestyle choices
- Discuss the interplay between personal and collective actions for sustainability
- Consider justice, human rights, and collective action as integral goals in the attainment of sustainability
- Learn to think broadly, critically, and responsibly about the concept of our ecological footprint
- Join a "guild" of craft apprentices under the guidance of a skilled practitioner, electing for one of the following tracks:
  - social entrepreneurship for sustainability
  - nature writing
  - toolcraft: making and fixing
  - sustainable forest management

#### **COURSE TEXTS**

Matthew Crawford, "Shop Class as Soulcraft" (handout) Paul Hawken, *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming* Wangari Maathai, *Unbowed: A Memoir* Additional texts to be assigned in each Skill Track (see below)

# **COURSE REQUIREMENTS**

- 1) Book notes (for core books)
- 2) One-Idea paper (1)
- 3) Attendance at daily lectures
- 4) Full participation in daily small group discussion
- 5) Full participation in one of the Skill Tracks
  - Each track will have its own requirements (see below)

# **EXPLANATION OF REQUIREMENTS**

1) Book notes

Students will continue note taking of core books. Notes may be collected on a daily basis by professors, so students must bring them to discussion every day.

2) One-Idea paper (1)

Isolate one major idea from the week's assigned readings, then write one page in which you describe and analyze the idea in your own words, while being as faithful as possible to the author's intent. Be prepared to read this to your Friday small group and handle questions and responses from the group.

# 3) Attendance at daily lectures.

Absences must be excused.

# 4) Full participation in daily small group discussion

Absences must be excused. Come prepared with all reading completed and book notes in hand. Dive in.

# 5) Skill Tracks

- - Course packet of PDFs of other relevant essays or chapters of relevant texts.
  - Workshop: This course provides an intensive, hands-on experience designing a sustainable intervention to address a sustainability problem. The goal of this skill track is to help you convert your knowledge and passion into impact. The target audience is individuals or teams who are passionate about an environmental problem and would like to dig deeper in developing a plan that they can use to contribute to a solution.
  - Final Project: By the end of class, students will create a plausible design, implementation and funding plan for a solution that addresses their environmental problem. This solution or intervention could take many forms. Business or non-profit plans, policy and advocacy plans, media and awareness campaigns and activism plans are all possible. Determining the correct path(s) is part of the learning objectives for the course.

# 2) NATURE WRITING

- Assigned reading: Prentiss, Sean and Joe Wilkins, eds. Environmental and Nature Writing: A Writer's Guide and Anthology. Bloomsbury, 2017. Other readings as determined by student interest.
- Workshop: A series of close readings, daily journals, writing exercises, group discussions, and workshopping done on and off the trail. We will focus on the fundamental techniques of good nature writing (imagery, description, exposition, character, research, making meaning) and the ongoing encounters you have with the more-than-human world here in the Cascade-Siskiyou National Monument.
- Final Project: Your final project will be a creative nonfiction essay (of various types), a small group of poems, or a reportorial piece about an environmental issue or problem, determined through individual consultation with the professor. Completed projects should be polished and ready for performance at the student-led OE reading. You may also wish to submit your finished piece to an online journal/magazine of your choosing.

# 3) TOOLCRAFT: MAKING AND FIXING

# > Assigned reading:

Robert Pirsig, Zen and the Art of Motorcycle Maintenance Peter Korn, Why We Make Things and Why It Matters: The Education of a Craftsman

- Workshop: We will fell a trees in our forest, mill them into dimensional lumber, then build writing desks in the OE woodshop out of seasoned lumber harvested last year from our forest. Students will do the work, learning as they go how to identify good lumber trees and to grade lumber, how to operate chainsaws, an outdoor sawmill, table saws, planers, jointers, drill presses, routers, and clamps. They will learn and practice techniques of joinery, drawer construction, sanding, and finishing. Additional projects may be incorporated, including auto maintenance, upholstery, vacuum repair, and electrical wiring. The assigned readings will be discussed in small group, with the explicit aim of reflecting on how making and fixing things builds tacit knowledge and affection for tools and materials, and contributes to living sustainably by reducing cycles of consumption.
- Final Project will be finished writing desks that will be placed in the students' cabins. Students will have performed every step involved in transforming a living tree into a sturdy piece of furniture.

### 4) FOREST MANAGEMENT (lab science)

- Assigned reading:
  - To be determined
- Workshop: Working with local ecologists and OE professors, students will experience a variety of forest sites with a range of monitoring and management impacts, such as prescribed burn, fuel

reduction, and previously harvested and planted forest tracks. This lab engages in research that develops and implements monitoring systems which can evaluate the effectiveness of variances of practice within forest management, thus contributing to a long term, adaptive management framework for a given forest (Block and Conner, 2016). Students spend two weeks in the Cascade-Siskiyou National Monument identifying and establishing test plots relevant to forest management in fire-prone coniferous forest. Students will contribute to longitudinal studies of flora diversity in unmanaged second growth conifer forest, in conifer forest undergoing fuels reduction, and in conifer forest where prescribed burning has occurred. Students will measure impact on fauna diversity in small mammals and birds in unmanaged second growth conifer forest, in conifer forest where prescribed burning has occurred.

- Students will visit a one- year- old wildfire forest site and identify regenerative characteristics of the forest ecosystem.
- Method: Students will collect data with wildlife cameras, GPS-enabled sensors, direct observation, and field notes. Data will be inputed into ongoing record keeping and graphs illustrating updates at each test site will be generated.
- Final Project: Students will present and interpret their results in a presentation form, as would occur in a scientific conference setting.

### 5) Research Project

Students may petition OE professors to do a more traditional Research Project as an alternative to these four tracks. If approved, follow general guidelines for Research Project process in Segment 2 syllabus.

# GRADING

#### Grades will be assessed based on the following:

- Quality of book notes, one-idea paper, and discussion group participation
- Documented completion of all reading and book notes on time
- Participation and engagement in requirements in all phases of Skill Track
- If approved to do a non-track Research Project, see applicable "Grading" guidelines in Segment 2 syllabus
- Self-evaluations, followed by faculty-student conferences, at the end of the segment

#### Assessment will be performed according to the following guidelines:

- We reserve the **A** for the combination of consistently high *effort* and *achievement* displayed across the board in your written and spoken work during the segment. Participation in the Skill Track was whole-hearted, and showed strong personal initiative, helpful collegial support of others in the track, and a notable learning curve in skills-acquisition. If student opts to do a Research Project, it must be well written and well researched. Seminar presentation or final written work (where applicable) is confident, clear, and coherent.
- **B** indicates high effort but less than high achievement; or moderate effort but (nonetheless) relatively high achievement.
- C indicates moderate effort at best and significantly less than high achievement.
- **D** indicates low effort and low achievement generally.

#### SCHEDULE OF TOPICS AND READINGS

See Segment 3 calendar.

# **COURSE CREDIT**

Students will choose from among the following course offerings, based upon the Skill Track they joined.

BUAD 397 – Sustainable Business ENVS 397 – Toolcraft for a Sustainable World LIT 397 – Nature Writing for a Sustainable World BIO 397 – Forest Management Lab Science for a Sustainable World (receives lab science credit) If an alternative Research Project is approved, it will be designated in advance as one of the following courses:

### ART 396 - Artistic Perspectives on Sustainability

An examination of selected aspects of sustainability as interpreted by the work and/or thought of a major artist or artists.

### **BIST 397 – Biblical Perspectives on Sustainability**

An examination of sustainability by means of careful, detailed exeges is of selected, pertinent biblical texts.

### HIST 397 – Historical Perspectives on Sustainability

An examination of sustainability in light of selected significant historical events and/or thinkers.

#### PHIL 397 - Philosophical Perspectives on Sustainability

An examination of sustainability as understood by selected philosophical thinkers or systems of thought.

### PSYC 397 – Psychological Perspectives on Sustainability

An examination of sustainability as understood by selected psychological theorists or systems of thought.

# **REL 397 – Religious Perspectives on Sustainability**

An examination of sustainability as understood by selected religious thinkers or systems.

### SOC 397 – Sociological Perspectives on Sustainability

An examination of sustainability in light of the scientific study of human social behavior and social theory.

### **Directed Study 397**

An individualized course of study, examining a topic of critical interest to a student in an academic area not included in the What Is a Sustainable World? course listings. Topic will be concurrently approved by the student's home campus academic advisor and the Oregon Extension faculty.