**ENVS 375 (Spring 2017; 36579)**
Oregon Seminar
Environmental Studies 375
Physical, Natural, and Cultural History of Oregon
Spring 2017
CRN: 36579
TU, 2-5, 111 Huestis Hall

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**Introduction**

This seminar is designed to broaden, deepen, and integrate your understanding of the materials presented in the three linked Oregon Abroad courses (Oregon Field Biology, Environmental History of Oregon, and Environmental Geology). Here and in all the constituent courses, we will work together to establish a learning community, based on open inquiry, curiosity, respect, cooperation, and constructive critical exchange. As controversial issues arise, it is essential that we respect each other, expressing ourselves clearly, courteously, and concisely, in ways that open up, rather than close down, conversations that promote learning.

Each meeting will be guided by a set of key themes, problems, or questions and will require that you complete and think carefully about the short readings assigned. Additionally, we will draw on weekly readings assigned in the other Oregon Abroad courses. To promote critical thinking and enhance discussion, most weeks you will be required to write a short essay or paper (approximately 500 words, or two typed, double-spaced pages, not including references or figures) in response to a question we provide. These papers should help to focus your thoughts and enable you to take an informed and active role in class discussion.

Active participation is required; it is critical to your success in the class and will make discussions more engaging, productive, and enjoyable for all. In our learning community,
participation is a responsibility. All of us have insights, skills, and experiences to share, and we can all find ways to contribute—through questions as well through as commentary. As a group, we should use the seminar to practice the art of listening as well as speaking to ensure that all have an opportunity to contribute. Focused and concise contributions will best advance of our conversations and build intellectual community.

Learning Objectives & Outcomes
By the end of the term, in combination with work done in our other Oregon Abroad courses, you should be able to:

• Trace the physical, natural, and cultural history of the Oregon landscape, particularly from the mid-19th century to the present.

• Explain Oregon as “landscape”—that is, as physical space that is simultaneously natural and cultural.

• Critically analyze, interpret, and integrate a range of disciplinary and interdisciplinary materials in the Sciences and Humanities that inform us about Oregon’s dynamic and diverse physical and natural environment.

• Write essays that present and develop your own argument or thesis, illustrated and supported by evidence.

• Assess and contextualize information about contemporary environmental problems that confront Oregon, including those in the realm of social and environmental justice.

Requirements & Evaluation
Students are responsible for completing all reading and writing assignments by the time indicated on the syllabus and are expected to attend all class meetings and participate actively. Students must complete all assignments in order to pass the course.

Students will write approximately 5 short essays during the term, as well as complete an individually designed, written term project, approved by the instructors, which they will present to the class in week 10. There are no exams. Grades will be assigned according to the quality of your essays, your participation in class discussion, and your presentation and the written version of your final project.

Essays (5 @ 10% each) = 50%
Participation = 25%
Final project = 25 %
Canoeing on the Eugene Millrace (University of Southern California Libraries and California Historical Society).

Essays
Students are required to write five short essays throughout the term (according to the schedule below) that briefly engage and reflect on the weekly readings, themes, and questions. There will usually be no specific prompt; instead, you should explore central points that you have distilled from the reading and offer your reflective responses, interpretive insights, consideration of implications, possible objections, further development of the ideas, unresolved questions, and so forth. Essays are due in class each Tuesday, as described in the weekly schedule below.

We expect your essays to make one larger point, not to offer a list of discrete or random items, however interesting those items might be. Essays should be clear, systematically organized, concrete, with specific evidence or examples to support your points, and competently written according to the conventions of English usage and grammar. We don’t expect literary masterpieces, but we do expect solid, clear, grammatical writing. A separate handout will explain our expectations and evaluation criteria more fully.

These essays are designed to be a means of thinking through and developing insight about weekly course material; they should prepare you to participate more fully and thoughtfully in class discussion. Because they are preparatory to seminar meetings—not postdoc summaries of those conversations, late essays cannot be accepted. The essays you write for week 1 are an exception—they will be due after our Tuesday meeting, on Thursday April 6. Students must complete all five essays to fulfill the requirements of the course. Student with last names beginning in the letters A-M should submit essays in weeks 1, 2, 4, 6, 8. Students with last names beginning in the letters N-Z should submit essays in weeks 1, 3, 5, 7, 9.

Class Projects: The Eugene Millrace and Willamette River
Eugene’s Willamette River and the power canal or “millrace” built by early settlers in the 1850s are complex but integral physical, natural, and historical features that have shaped the city’s dynamic past and continue to affect its present and future. In the fifth century BCE the Greek philosopher Heraclitus famously observed that one “cannot step into the same river twice.” What did he mean? Heraclitus clarified that both rivers and people constantly change. What about the Willamette and its millrace? What are they—places, structures, processes, habitats, ecological systems, ideas—all of these at once?

In conjunction with our seminar, we will study the river and millrace collectively and individually through projects that students will define in consultation with the instructors and each other. Taking advantage of our diverse interests, training, and experience, together we can explore and assess the current state of Eugene’s river and millrace, examine how the millrace and river got this way, diagnose problems or challenges associated with them, and perhaps reimagine their restoration, preservation, or improvement.

Guidelines for projects will be distributed separately. Students should select research projects that make best use of their training, expertise, and interests (though we hope that all of these will advance during the class, and we are happy to help students acquire new disciplinary tools). In week 10, students will submit a written version of their project and offer a brief presentation to the class highlighting their research, its results, and their conclusions. Individual projects may be related but shouldn’t overlap excessively. A range of term projects will allow us to study the millrace and river broadly, and through students’ final presentations permit us to learn from each other and expand our collective knowledge.
Academic Integrity

Academic integrity is important and academic misconduct will not be tolerated. We will hold all students accountable. UO Student Conduct Code can be found at:

http://policies.uoregon.edu/vol-3-administration-student-affairs/ch-1-conduct/student-conduct-code

The University Student Conduct Code defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. By way of example, students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g., quotations, paraphrases, ideas). If there is any question about whether an act constitutes academic misconduct, students are obliged to clarify the question with instructors before committing or attempting to commit the act. Additional information about a common form of academic misconduct, plagiarism, is available at researchguides.uoregon.edu/citing-plagiarism.

Weekly Reading, Discussion, and Field Trip Schedule

Note: In addition to the assigned readings below (available in the File section of this Canvas site), our discussions will address the readings assigned in other Oregon Abroad courses for the week in question. Please read and be prepared to discuss this additional material, which will help us integrate our interdisciplinary learning.


Does nature have a history? What is “nature,” and how is it related to “culture”? How are both related to the physical world? Is history fundamentally humanistic, or can the non-human world—or even the nonorganic world—have “history”?

Readings:

History: Henry David Thoreau, excerpt from “Huckleberries” (1861); and “The Bean-Field,” from Walden or, Life in the Woods (1854). Thoreau’s writings can be found online; see especially the Walden Woods Project: http://www.walden.org/Library/The_Writings_of_Henry_David_Thoreau:_The_Digital_Collection/Walden (Links to an external site.).

“Eugene Millrace: A History.” (Online: See Week 1 Readings in Files)


Essay 1 Due prior to field trip.

Field Trip (Thursday, April 6): Eugene Millrace

Week 2 (April 11): A River Runs Through It: Willamette River, Willamette Valley
What is a river . . . ? Is it a physical, a natural, a human space? Is it a process, a machine, an organic being? What are the economics, politics, and ethics of its manipulation? Is it alive or dead? How do we conserve, preserve, or restore it, and what are the practical implications of each? How do waterfalls form and how do they transform or affect ecologies? Why do humans concentrate settlement or activity around them? What is the Eugene Millrace, and what is its connection with the Willamette River?

**Note:** We will be joined today by Michael Harwood, associate vice president for Campus Planning and Facilities Management at the UO, who will discuss with us developing plans for the restoration of the Eugene Millrace.

Canoeing on the Eugene Millrace (University of Southern California Libraries and California Historical Society).

**Readings:**


**Field Trip (Thursday, April 13): Willamette Falls and Oregon City**

**Week 3 (April 18): Landscape, Environmental Alteration, “Improvement”**

What do we mean, conventionally and historically, when we “own” and “improve” land? How are “agricultural improvements” critical in the assertion of land claims. What are the origins of these ideas, and do these environmental alterations in fact constitute “improvement” when evaluated by different, modern criteria? How do earth scientists and biologists understand and assess the human enterprise of agriculture?
What has human settlement altered in terms of river form and flood frequency?

Is it necessary to differentiate between native and non-native species? Is this a social construct or a biological one? What should we call non-native species? Should we fight them? What are our alternatives?

Readings:


**Field Trip (April 20): Dorris Ranch and Mount Pisgah**

**Week 5 (May 2): Rivers and Salmon**

Are the rivers of the Northwest today so unnatural, so altered and so controlled, that they are simply machines? What about the salmon that navigate them? Can we have rivers without salmon and salmon without rivers? Are hatchery fish simply organic machines, not “real” salmon—is there a fundamental difference between hatchery-produced and wild salmon? Who decides, and what are the consequences and implications?

Why do salmon like some rivers more than others? How do dams alter the hydrologic cycle as well as channel characteristics?

Is human-mediated selection altering salmon?

Can salmon be sustained over evolutionary time scales?

Reading:


**Field Trip (May 4): None (We leave for Malheur on Saturday, May 6)**

Week 6 (May 9): Malheur, Eastern Oregon, Great Basin

What is geologically distinctive about the Great Basin landscape? How did it form? Can glaciation cause mountain uplift? How does extension make mountains? How unique is the current climate of eastern Oregon? When and why was the region peppered with lakes and streams?

The Great Basin landscape is sometimes called “desolate” by unfamiliar visitors. Why and on what basis might biologists disagree? How and why has the distribution of sagebrush and junipers changed in recent times (past 150 years or so) and should we do something about it? Do different constituencies (ranchers, wildlife managers, environmentalists) have the same opinions about (a) whether the distributions are changing, and (b) what should be done and why?

How have humans accommodated the aridity of the “Great American Desert”? How did successive human occupants of places like southeast Oregon—from Paiutes to white “pioneers” to industrial farmers and ranchers to contemporary preservationists—either adjust to the landscape or attempt to make it adjust to them? What have been the consequences? How and why has this been a source of conflict?

Reading:


Biology: Denzel and Nancy Ferguson, *Oregon’s Great Basin Country* (Bend, OR: Maverick Publications, 1978) Ch. 7, “Adaptations to Arid Environments,” pp. 78-87, and Ch. 9, “Environmental Problem,” pp. 95-107. Chapters 6 & 7, pp. 32-77, also posted on Canvas, are good references for the plants and animals we will see.

Week 7 (May 16): Malheur and Eastern Oregon in Perspective
Perspectives on our trip to Malheur and Eastern Oregon . . .

How do the recent environmental and political controversies at Malheur and in the Klamath Basin represent, in microcosm, the legacies and dilemmas of Oregon environmental policy and history over the last 100 years? How is Malheur, or other western landscapes, "a place for stories"? How and why do stories matter?

Humans appear to be biased against things they perceive to be common, sometimes with disastrous consequences (such as for passenger pigeons, buffalo, wetlands and salmon). Conservation has traditionally focused on rare species. Does this approach make sense? What about common species?

Reading:


Field Trip (May 18): None

Week 8 (May 23): Oregon Coast

How has Oregon’s Pacific Coast location affected its physical, natural, and cultural history? How have human affected the Oregon Coast? Is the coast a place particularly vulnerable to “natural disasters”? What is a “natural disaster”? What makes it natural or unnatural, a calamity or a nonevent? What sort of threat do earthquakes and tsunami represent, and how do we understand and accommodate them? How do we accommodate the conflation of historical and geological time frames?

Assess the common expression, "a day at the beach." What do we mean for example when we say, describing endurance of difficult circumstances, "it was no day at the beach"? What does that tell us about our attitude toward beaches? Are such attitudes historically specific, and if so when and where and why might such perspectives have emerged?

Are there features along the Oregon Coast that reflect its history of M=9.0 earthquakes every ~500 years? Where do sand dunes come from and why is Oregon so endowed with sand? How do different rocks dictate coastal landforms?

How do humans influence organisms that live on and in dunes? Should we manage dunes systems? How?

Reading:


Field Trip (May 25): Oregon Coast

Oregon Coast.

Monday, May 29: Memorial Day Holiday

Week 9 (May 30): Cities, Urban Environments / Wetlands

What are the connections between cities and surrounding suburban, rural, or wilderness areas? How natural or unnatural are cities, and how natural or artificial are suburban and rural hinterlands? How would one assess the environmental history of Eugene? What can we do to make cities and towns more diverse and ecologically sustainable? Can we make them less of an impediment to species needing to change in distribution as a result of climate change? What kind of a world do we want to live in 40 years from now and 200 years from now?

What’s the difference between a “swamp” and “wetlands”? When did the former become the latter? How do we define them physically, and how and why do they form? Are they a legacy of catastrophic events in the landscape? Do wetlands in the Willamette Valley owe their origin to the Missoula Floods? If wetlands are so critical ecologically, why have they been so disparaged and subject to relentless physical alteration? What is the value of wetlands? Can we mitigate wetlands loss? Can we reconstruct wetlands? Should we try?

Reading:


**Field Trip (June 1): West Eugene Delta Ponds / Wetlands**

**Week 10 (June 6): Student Presentations**

Student project presentations Monday-Wednesday, June 6-8.


**Field Trip (June 8): Spencer Butte Hike**

**Week 8 (May 23): Oregon Coast**

How has Oregon’s Pacific Coast location affected its physical, natural, and cultural history? How have human affected the Oregon Coast? Is the coast a place particularly vulnerable to “natural disasters”? What is a “natural disaster”? What makes it natural or unnatural, a calamity or a nonevent? What sort of threat do earthquakes and tsunami represent, and how do we understand and accommodate them? How do we accommodate the conflation of historical and geological time frames?

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**Reading:**


**Field Trip (May 25): Oregon Coast**
Dune and pond, Oregon Coast.

**Monday, May 29: Memorial Day Holiday**

**Week 9 (May 30): Cities, Urban Environments / Wetlands**

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**Field Trip (June 8): Spencer Butte Hike**

Spencer Butte, looking east.

**Final Projects Due Monday, June 12.**