MOUNTAINS TO THE SEA: CONSERVATION AND MANAGEMENT OF WATER AND FOREST RESOURCES IN CHILE

CRN: Undergraduate: FES 499/FOR 499; Graduate: FES 599 Special Topics in Forestry

Credits: 3

Offered: March 2017

Course Instructors:

Dr. Christopher Still, Forest Ecosystems and Society

Dr. Carlos Gonzalez-Benecke, Forest Engineering and Resource Management

Course Description

This course explores the complex ecological, climatic, and management dimensions of forest management, conservation and restoration through an immersive experience in Chile.

Over a period of one week, students will be part of an intensive investigation of forest ecology and management in a wide range of Chilean forest ecosystems. This will include natural Chilean forests and managed forest plantations in a range of settings from the coast to the Andes foothills. Student will interact extensively with Chilean students and also Chilean faculty who are working on various aspects of forest ecology, resource conservation, research, and management.

Students will be exposed to multiple perspectives, requiring them to listen and observe carefully, think critically, and reflect deeply on the complex web of issues facing Chilean forest managers and conservationists. Through this immersive learning experience, students will be able to critically analyze forest conservation, restoration, and management challenges in their own home countries.

Tentative Itinerary

The course will be conducted primarily in three locations: 1) Valdivia, Chile and a nearby coastal reserve managed by The Nature Conservancy (Reserva Costera Valdiviana); 2) the field station at San Pablo de Tregua owned and managed by

Universidad Austral de Chile; and 3) the Senda Darwin Biological Station on Chiloe Island.

After receiving a one-day overview of the context of forest management and conservation at the Nature Conservancy's Coastal Reserve near Valdivia, we will visit the Universidad Austral de Chile in Valdivia and meet other Chilean students and faculty. We will then travel to San Pablo de Tregua for an intensive 2 days of focused research into forest ecology and management. This field station is in low-elevation mountains near the Andean foothills and harbors mostly primary forest, in a diverse landscape including forest plantations planted with exotic species (including Douglas-fir), small-scale agriculture, and other development. We will then travel to the Senda Darwin Biological Station for another multi-day investigation of natural and planted forest ecosystems on spectacular Chiloe Island.

Oregon State University students will work and learn alongside students from Universidad Austral de Chile for part of the week. Activities will include forest tours, field ecology measurements and analyses, assistance with the research of Chilean researchers, and group presentations.

Catalogue Description

With the explicit goal of enhancing global learning, this field-based course immerses students in the challenges and opportunities of forest ecology, restoration and conservation, and management in a part of Chile that has many parallels with the Pacific Northwest. Students will learn from hands-on field research about managing and in some cases restoring Chilean forests for a variety of uses, from timber production to wildlife habitat to ecosystem services. The global context of forest management, restoration, and conversion will be emphasized, with the aim of preparing students to critically analyze similar issues throughout the world.

Student Learning Goals/Expected Outcomes

Upon completion of this course, students will be able to:

1. Analyze and articulate interconnections between local conditions and global ecological, social, political, and economic trends affecting forest conservation and management.
2. Articulate key concepts of forest ecology as applied to forest management and conservation.
3. Work collaboratively in interdisciplinary teams toward established research, education and outreach goals.
4. Develop and articulate research questions germane to course themes, collect relevant primary and secondary data using appropriate research methods, synthesize research findings and present them through professional oral and written communications.

Prerequisites

To register for this course, students must:

1. 1.Have achieved at least sophomore standing, and a 2.75 GPA or permission of instructor.
2. Submit a complete application through the OSU GO system, which includes a personal essay, unofficial transcript and recommendation.

Student Learning Assessment

Each student will prepare a course portfolio documenting their learning experience and outcomes. Portfolios will include a combination of the following:

1. Personal learning objectives and self-assessment of learning
2. Field notes, writing assignments, journals
3. Class critiques of student presentations
4. Graded final projects
5. Student and faculty assessment of student participation in and contribution to class activities

In addition, each student will participate in an exit interview with course instructors**Evaluation of student performance:** Grading A-F. Students will assessed on their 4 modeling assigments (10% each for a total of 40%), along with the final term paper assignments, in-class presentation, and report (60%).

Learning resources: there will be no textbook for this course; relevant readings and other materials (e.g., popular media, news articles, videos) will be provided.

Statement Regarding Students with Disabilities: Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Expectations for Student Conduct: All students will be expected to follow the ***student conduct and community standards*** of Oregon State University (http://studentlife.oregonstate.edu/studentconduct/offenses-0). Cheating or plagiarism by students is subject to the disciplinary process outlined in the Student Conduct Regulations. Students are expected to be honest and ethical in their academic work. Academic dishonesty is defined as an intentional act of deception in one of the following areas:

- **CHEATING** - use or attempted use of unauthorized materials, information or study aids or an act of deceit by which a student attempts to misrepresent mastery of academic effort or information. This includes unauthorized copying or collaboration on a test or assignment or using prohibited materials and texts.
- **FABRICATION** - falsification or invention of any information (including falsifying research, inventing or exaggerating data and listing incorrect or fictitious references.
- **ASSISTING** - helping another commit an act of academic dishonesty. This includes paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, or taking a test/doing an assignment for someone else (or allowing someone to do these things for you). It is a violation of Oregon state law to create and offer to sell part or all of an education assignment to another person (ORS 165.114).
- **TAMPERING** - altering or interfering with evaluation instruments and documents.

- **PLAGIARISM** - representing the word or ideas of another person as one's own OR presenting someone else's words, ideas, artistry or data as one's own. This includes copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project, then submitting it as one's own.

Behaviors disruptive to the learning environment will not be tolerated and will be referred to the Office of Student Conduct for disciplinary action.