

**ENVIRONMENTAL STUDIES 187
INTRODUCTION TO ENVIRONMENTAL RESTORATION
FALL 2015**

Class Hours: Tuesday/Thursday 9am - 10:15am, Saturday Field Trips 9am - 12pm
Lecture Location: Duncan Hall 415
Instructor: Miranda Melen
Office Hours: Tuesday/Thursday 10:30am – 11:30am, or by appointment
Office: WSQ 115B
Email: miranda.melen@sjsu.edu
Course Website: available on Canvas
Course Units: 4 (= 12 hours per week)
Prerequisites: 100W, GE B2, or consent of the instructor

COURSE OBJECTIVE

This course is designed to introduce you to the interdisciplinary field of environmental restoration. Scientific restoration efforts date back to the prairie restorations in the 1930s at the University of Wisconsin Arboretum. But only recently has restoration been recognized as an important scientific, political, and public endeavor. Although the physical restoration of a site is based on our technical knowledge of ecological systems, successful restoration efforts often include biologic, economic, political, regulatory, and public participation elements.

Interest in restoration has been spurred by at least two developments:

1. Government regulations have required that project proponents compensate (“mitigate”) for damage they cause to the environment, and
2. The public has recognized that in order to preserve endangered species, protect ecosystem services, and improve our living environment, we need to restore habitats that have been degraded or destroyed.

The San Francisco Bay Area is a hotspot for biodiversity, human development, and landuse change. Many different habitats have been restored in our regional area and through this course we will study a selection of those available.

This course provides an overview of three main topic areas:

- **Ecology:** the ecological principles that form the basis of the field of restoration
- **Theory:** the theoretical underpinnings of restoration and methods of practice
- **Implementation:** the process of restoration (design, implementation, and monitoring), economic factors that affect and direct restoration, importance of public participation, and current challenges in restoration practice and science

COURSE FORMAT

This is a lecture and field course that requires extensive reading and research outside of the classroom. **This is a four-unit course, which means you are expected to devote 12 hours of work per week to this class through participation in the classroom, field trips, homework, and independent study.** You must prepare for each class session by doing the appropriate readings or work. You will be working within the body of knowledge of the fields of ecology and restoration, and will conduct independent research as well as work in a group to conduct a case study of a local

restoration project. A group presentation in the field is the culmination of this work. Finally, exams and quizzes will allow you to show off your knowledge of the materials covered in class.

ASSIGNMENTS

The table below is a *tentative* list of assignments for the class. Assignments may be changed, added, or deleted as needed. **You must come to class to keep up to date with the assignments.** This class is fast-paced, time consuming, and difficult because it covers so much material in preparation for more advanced work in Advanced Restoration (ENVS 191) and your professional career. Your effort in this course and understanding of the material will be evaluated in weekly quizzes, a series of group assignments, exams, case studies, and attendance at field trips.

<u>Assignment</u>	<u>Point Value</u>
Ecosystem Summary, final draft	50
Ecosystem Summary, final paper	100
Individual Guidebook, final draft	100
Individual Guidebook, final paper	200
Case Study 1	50
Case Study 2	50
Group Outline with References	25
Group Paper, Final Draft	100
Group Paper, Final Paper	200
Group Performance Review 1	50
Group Powerpoint Slides, Map, Directions	50
Group Presentation and Methodology Demo	150
Group Field Trip - Restoration Presentation	500
Group Field Trip - Field Methods Presentation	150
Group Performance Review 2	50
Quizzes (17)	410
Field Trips	10
Extra Assignments	10
Midterm 1	150
Midterm 2	150
Field Exam	50
Final Exam	200
Estimated Total	2,840 points

REQUIRED TEXTS

Greipsson, Sigurdur. 2011. Restoration Ecology. Jones & Bartlett Learning, LLC. Sudbury, MA.

UNIVERSITY RESOURCES

Library Liaison

Peggy Cabrera is our liason for Environmental Studies. Reach her at: peggy.cabrera@sjsu.edu

SJSU Writing Center

The SJSU Writing Center is located in Room 126 in Clark Hall. This can be a source of great help. <http://www.sjsu.edu/writingcenter>

CLASS POLICY

Late Assignments:

All assignments are due on the day that they are listed. Late assignments are accepted up to one week after the assignment was initially due. The first late assignment may be turned in with no penalty. The second late assignment will be penalized 30% (from the total score earned). The third late assignment will be penalized 60% (from the total score earned). If you miss 4 or more assignments you will not pass this class. There are no late quiz allowances.

Field Trips:

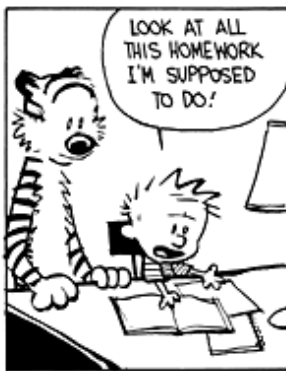
Field trips are an essential part of this course. You may miss one field trip without penalty by contacting the instructor for permission. If you miss a field trip without instructor knowledge, your grade will go down a full letter grade. Students who miss three field trips will not pass this course.

Grading:

Grades are determined according to this scale:

98-100% = A+	88-89% = B+	78-79% = C+	60-69% = D
92-97% = A	83-87% = B	72-77% = C	59 and below = F
90-91% = A-	80-81% = B-	70-71% = C-	

Your grade will be accessible via Canvas or in office hours.



Calvin and Hobbes by Bill Watterson

UNIVERSITY POLICY

Academic integrity

You should know that the University's Academic Integrity Policy is available at www.sjsu.edu/senate/docs/S04-12.pdf. Your own commitment to learning, as evidenced by your enrollment at San Jose State University and the University's integrity policy, require you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The website for Student Conduct and Ethical Development is available at www.sjsu.edu/studentconduct/.

Instances of academic dishonesty will not be tolerated and immediately reported to the University. Cheating and plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) on quizzes, exams, and assignments will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified as group work. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me in the first two weeks of class or as soon as possible. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the AEC (Accessible Education Center) to establish a record of their disability.

Policy S12-3 regarding Definition of the Credit Hour

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty-five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Policy S12-7 regarding Consent for Recording of Class and Public Sharing of Instructor Material

Common courtesy and professional behavior dictate that you notify someone when you are recording them. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the visual or audio material.

- Video recordings may not be taken of this class.
- Audio recordings are permissible, but may not be reproduced or distributed.

Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without their approval. You may not publicly share or upload instructor-generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.