

GEOG 657/ENVS 657: Natural Resource Management: Biotic Resources

San Francisco State University, Spring 2007

HSS 287, MW 3:10-4:50 with additional time tba

4 units

[QUICK LINKS](#)

PROFESSOR: Dr. Barbara A. Holzman

OFFICE: HSS 267

OFFICE HOURS: MW 1-2 am, or by appt.

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CLASS WEB PAGE: <http://bss.sfsu.edu/holzman/courses/657>

This class satisfies the 600 level- class requirement in GEOG, the methods requirement in ENVS-NRMC, and can be used to fulfill the field or quantitative methods requirement for MA RMEP students with consent of advisor.

**Course Description:**

The course will provide the basics used in managing forest, wildlife and range. This includes a discussion of agencies involved in managing these natural resources as well as the laws and policies that govern natural resource management. Exercises and examples of using various techniques to measure and monitor natural resources, including statistics and geographic information systems will be provided. We will visit or hear from many experts in this field.

Exercises, labs and field trips will include practical methods for assessing, measuring and monitoring natural resources.

### **Learning Objectives for course:**

- To understand the basic laws and policies that govern natural resource management.
- To learn basic methodologies used in measuring forest, wildlife and rangeland resources.
- To be able to complete a lab, write a lab report accurately, concisely and with precision.
- To understand some of the controversies and complexities in the field of natural resource management.

This course is designed to meet on a regularly basis and to include field trips to meet experts in the field and examine current problems and solutions within natural resource management.

**Prerequisite:** Geography 101 and Geography 103 or consent of instructor, upper division or graduate standing in a related field.

### **Textbook and Readings:**

You must purchased the *Pacific Coast Tree Finder* (small booklet)

[Readings will be on reserve in the Map Library \(HSS 289\)](#)

### **Getting an A**

**Grading** will be on a percentage basis 100-90% A, 89-80% B, 79-70 C, 69-60% D. Plus/minus grades will be assigned for points near the margin. I would be more than happy to give everyone As provided you reach the desired goals (i.e. > 89% of all points)

Exam 1-4 (10% each)

40%

Final project & presentation	20%
Assignments, Lab Reports and Field Trips	35%
Attendance/Participation	5%

**Exams 1-4 (40%)** Exams are a combination of objective format (multiple choice, matching, fill in the blank, etc.) short answer, and short essay. Makeup exams will only be given in cases of **verifiable** illness or **verifiable** emergency, otherwise **do not ask!** Any makeups may be entirely essay or oral exam format.

**Lab reports:** For each lab you will be required to complete a lab report. This involves a write up that includes introduction (objectives, literature research), methodology, results and analysis and conclusion. It should be 3-5 pages long. While the lab work and data gathering will occur as a group each student must submit her/his own lab report, unless otherwise directed. You will be required to attach the data derived from the lab to the report.

**Final Project:** For your final project, you will be asked to select an issue or question in resource management and investigate it through literature and field research. The product will be a scientifically written paper and presentation. Full details will be provided later.

PRESENTATION OF FINAL PROJECTS WILL BE MAY 14 AND 16

FINAL PROJECTS WILL BE DUE MAY 21 without exception. [Click here to download the project assignment](#)

### **Attendance and Participation**

Attendance will be taken each class. Each student is allowed one unexcused absence without it affecting their participation grade. A percentage of this portion of the grade will be deducted each time a student has an unexcused absence after the initial one. Attendance is excused in the event of an illness, family crisis, or sanctioned university religious holiday.

This class is based on lecture and lab format; there will also be an emphasis on class participation. Students should come prepared to answer questions on the readings. Students should keep current on Natural Resource Issues in the press.

**FIELD TRIPS:** There will be field trips during class time that you are required to attend. There will also be at least three field trips on Saturdays or weekends, **you are required to attend at least two**, and you are welcome to attend all. There will be an assignment from each trip, you must complete two of these assignments and hand it in on time. You can choose to do all assignments and receive extra credit for the second. Two of the field trips will be weekend trips; you will be required to attend one. You will be asked to contribute to transportation costs for the field trips.

#### **Course Policies:**

You are expected to respect your instructor and fellow classmates by arriving to class **on time** and by remaining quiet while class is in session. Be aware that you disrupt class and prevent others from learning when you come to class late and talk while information is being presented. You will be asked to leave the class if you persist in these behaviors.

***Cell phones must be turned off before you attend class.*** If your cell phone rings during the class period, you may be dismissed from the class or I may answer it.

The nature of this course, in both breadth and content, draws on themes that may provoke independent thought and opinions. In fact, you may be moved to comment/ask questions in this course. I encourage you to be curious, participate in a mature manner and treat your colleagues with the highest degree of respect and professionalism. I, in turn, will treat you and the opinions/beliefs you may hold in an equal manner.

#### **Academic Integrity:**

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The University has established codes concerning proper academic conduct and the consequences resulting from improper behavior. Please be aware of these policies. The most important of which are academic misconduct (outside of classroom conduct-see above). Please be aware of these codes as they are observed from this classroom to the California Code.

(1) Students are responsible for knowing the San Francisco State University regulations concerning cheating and plagiarism that are described in the University Bulletin.

(2) Misconduct includes, but is not limited to: cheating on exams; fabrication of reports, assignments, sources, etc.; plagiarism or the reproduction of others' work without *proper* acknowledgment; interfering with another student's work; or helping another student cheat.

(3) Plagiarism is specifically defined as copying another person's words without appropriate acknowledgment. This includes: (a) quoting another person's actual words; (b) paraphrasing another person's words; (c) use of another person's idea, opinion, or theory; or (d) borrowing of facts, statistics, or other illustrative material, unless the information is common knowledge.

***(4) The essays and lab reports you write for this course are to be substantially your work. That is, long block quotes, paraphrasing or copying from the text or any other source, and copying another student's work are unacceptable.***

SFSU complies with the regulations of the Americans with Disabilities Act of 1990 and offers accommodations to students with disabilities. If you are in need of a classroom accommodation, please make an appointment with me to discuss this as soon as possible. All information will be held in the strictest confidence.

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The Schedule: Revised

This schedule is subject to change without advance notice. I will try to keep the website updated with current schedule changes. You should read the reading assigned prior to coming to class.

<b>Class</b>	<b>Topic to be discussed</b>	<b>Assignments</b>
1/24	<u>Introduction to course and class</u> What is natural resource management?	<a href="#">Review Assgn 1 (law review)</a> , Pick law in class and start research
1/29-1/31	<u>Laws in Natural Res./Government Agencies</u> Meet w/L. Jacobsen in Library <a href="#">History of Natural Resource Management</a> What agency is in charge of what resource	Readings # 1 <a href="#">Handout</a>
2/5-2/7	<u>Natural Resource Management Laws</u> Terms and Concepts Defined Law Presentations	Law Review presentations begin Tuesday <b>Assignment 1 is due Monday</b> Readings # 2
2/12-2/14	<a href="#">Ecosystem/Adaptive Management</a> Basic ecology principles	Readings # 3 <b>Assgn 2 Soil survey DUE 2/19</b> <b>Project idea due</b> <b>FIELDTRIP 2/17</b>
2/19-3/7	<u>Forest Management</u> (Labs 1 -2) Forest ownership in state and nation, growth and characteristics of forest species; harvest methods, forest inventory. Review basic statistics	Readings # 4, EXAM I: Laws, Conversions, Ecology Assgn 4: Statistics Review In Class: Tree ID Lab 1: Forest measurement

		Lab 2: Dendrochronology <b>FIELDTRIP 3/3</b>
3/12-3/26	<b><u>Rangeland Management</u></b> (Lab 3) Laws and agencies governing range management; growth and forage estimates; range condition and measures of use.	Readings # 5 EXAM II: Forestry In Class: Grass ID Lab 3: Range measurements <b>FIELDTRIP: 3/31-4/1</b>
3/28-4/16	<b><u>Wildlife Management</u></b> (Lab 4) Population estimation, animal movements, regulating populations, HCPs NO CLASS 4/18 AAG	Readings # 6 EXAM III: Range Management Lab 4: Assessing urban wildlife <b>Night Lab/Fieldtrip</b>
4/23-4/30	<b><u>Fire and Resource Management</u></b> Historical and Current Uses Fuel loading/Fire risks	Readings # 7 <b>Draft of project paper due</b> <b>FIELDTRIP 4/28-4/30</b>
5/1-5/9	<b><u>Management Issues in Urban Areas</u></b> (Lab 5) Dogs, cats, humans, access, compatibility <b>Ecosystem Management in California</b> Summary and course wrap up	Readings # 8 EXAM III: Wildlife & Fire Lab 5: Addressing Urban Issues Class trip to SFSNA
5/14-5/16	<b>Project Presentations</b>	Project Papers due 5/21 by 5pm

