

**COURSE SYLLABUS & OUTLINE. GEOGRAPHY 461.
CONSERVATION OF NATURAL RESOURCES
Fall 2007**

GENERAL INFORMATION:

COURSE DESCRIPTION: The conservation, utilization and abuse of natural resources will be stressed. Topics will include characteristics, distribution, economic and environmental aspects of resources associated with the earth's subsurface, land, soil, water, oceans, and atmosphere. The goal of the class is to inculcate facts regarding the earth's natural resources as well and discuss values related issues and elicit thoughtful discussion of issues vital to sustainable use of global resources. Lectures, videos and in-class demonstrations of geospatial technologies will help accomplish these objectives.

Meets: Lecture: Tu-Th 8:00-9:20 in Lee Drain Building (LDB) room 328. Instructor: Dr. Mark Leipnik. Office Hours: M.11-12, Tu. 9:30-10:30, in LDB 328 (or in LDB 313 by arrangement). Phone: Ex. 3698, email GEO_MRL@SHSU.EDU.

Homepage: [www:\\http\shsu.edu/~geo_mrl](http://www.shsu.edu/~geo_mrl). LECTURE NOTES FALL 2006 NATRUAL RESOURCES CONSERVATION contains lecture notes that can be brought into a word processor and expanded to provide extra space for class notes and used as a study guide. They will be updated for Fall 2007 prior to the first MIDTERM.

TEXT: "Natural Resources Conservation" by Chiras and Reganold, et al, 9th edition.

POLICIES:

GENERAL: Attendance at class is mandatory and will be taken at the beginning of each class; a roster will be used to facilitate this. Students that are more than five minutes late will be considered tardy. After the third absence 25 points will be deducted for each subsequent absence or tardy attendance.

GRADING: Grade in class will be on based two midterm exams and a final. The midterm exams will be on **September 18** and **October 25** and will consist of true and false, multiple choice and short answer questions. Each midterm exam is worth 300 points or 30% of the total grade. The final exam will be on **December 13** at too early an hour in the morning for a two hour exam that is 8 am-10 am.... the final will consist of multiple choice, short answer and will have an essay. The final will be comprehensive. The final will count for 400 points or 40% of the total grade. Grades are out of a possible 1000 points. 900-1,000 points earns an "A", 750-900 points earns a "B", 600-750 points earns a "C", 500-600 points earns a "D", less than 500 points earns *being skinned alive and lowered into a pot of boiling Tabasco sauce or a "F", at the choice of the student of course*....Students receiving less than an equivalent grade of "c" on an exam will have the option of doing an extra credit research paper on a topic selected by the instructor but related to natural resources. This paper will be worth up to 5 points per page for as much as the difference between their grade and the lowest grade equivalent to a "B" however this applies to only one Midterm.

ADDITIONAL INFORMATION:

CLASS ATTENDANCE POLICY: Absences in excess of three class meetings will be considered excessive regardless of cause; unless a prior written arrangement has been made with the instructor. Attendance will be taken at each lecture based on a roster. For the third missed lecture, 25 points will be deducted from the semester grade. Tardy attendance of more than 10 minutes will be considered an absence unless there is a valid excuse (*I was trapped in my house by a rabid possum...*is made and accepted).

CHEATING/PLAGARISM POLICY: Incidents of cheating will receive a sanction that is appropriate, typically the exam in which cheating was committed in reference to will provide zero point credit toward the final grade. Substitution of an appropriate make-up assignment may be allowed at the discretion of the instructor.

MAKE-UPS: If a midterm exam is missed for a valid reason it can be replaced by an extra credit research paper of at least 20 pages. The final cannot be made-up. Missed classes can be made up by doing an extra credit report of five pages. All extra credit/make-up work will be approved by permission of the instructor and on a topic assigned by the instructor related to natural resources.

Classroom Rules of Conduct: Students are expected to assist in maintaining a classroom environment that is conducive to learning. Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating or drinking in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

STUDENTS WITH A DISABILITY: It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request assistance with academically related problems stemming from individual disabilities by contacting the Director of the Counseling Center in the Lee Drain Annex or by calling (936) 294-1720. Any student seeking accommodations should go to the *Counseling Center and Services for Students with Disabilities* in a timely manner and complete a form that will grant permission to receive special accommodations.

VISITORS IN THE CLASSROOM: Unannounced visitors to the classroom must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom. This policy is not intended to discourage occasional visiting of classes by responsible persons.

Religious Holidays: Students that are absent from class for the observance of a religious holy day are allowed to take an examination or complete an assignment scheduled for that day within reasonable time after the absence. The period of time during which assignments and exams will be excused includes travel time associated with the observance of the religious holy day. A student who wishes to be excused for a religious holy day must present the instructor of each scheduled class that he/she will be absent from class for religious reasons with a written statement concerning the holy day(s) and the travel involved. The instructor should provide the student with a written description of the deadline for the completion of missed exams or assignments. . In such cases, the student will be required to take the test or submit the assignment early—unless there are good reasons for not being able to do so and the instructor has agreed to those reasons.

COURSE OUTLINE & READING ASSIGNMENTS:

In order to be well prepared for class students should read the chapters in the text book (Chiras, et al).

LECTURE 1: OVERVIEW.

Week 1.

Lec. 1. Tu. Aug. 21. First Class Meeting. (Handout syllabus, go over class Policies. Background, definition of Natural Resources Conservation).

Lec. 2. Th. Aug. 23. History of Natural Resources.

READ: Chapter 1.

PART I. LECTURES 2-6: Environmental Economics, Ethics, & Ecology

Week 2.

Lec. 3. Tu. Aug. 28. Natural Resources Law & Economics.

READ: Chapter 2.

Lec. 4. Th. Aug 30. Environmental Ethics, Ideology & Policy.

READ: chapter 3

Week 3.

Lec. 5. Tu. Sept. 4. Ecology.

READ: Chapter 4.

Lec. 6. Th. Sept 6. Human Ecology (Population),

READ: Chapter 5.

Week 4.

Lec. 7. Tu. Sept. 11. Soils & Agricultural Resources.

READ: Chapter 6.

Lec. 8 Th. Sept. 13. Soil Conservation, Review for Midterm.

READ: Chapter 7.

Video on dust bowl (portion). (Review Chapters 1-7).

Week 5. Class meeting 9. Exam I (Tu. Sept. 18) covers Chapters 1-5.

Part II. LECTURES 10-21: WATER, OCEANS, FORESTS & WILDLIFE:

Lec. 10. Th. Sept. 21. Return and go over MIDTERM, Pesticides

READ: Chapter 8.

Week 6.

Lec. 11. Tu. Sept 25. Water Resources I.

READ: Chapter 9.

Lec. 12. Tu. Sept 27. Water Resources II.

Videos on water resources issues.

Week 7.

Lec 13. Tu. Oct. 2. Water Pollution.

READ Chapter 10 and 11.

Lec. 14. Th. Oct. 4. Aquatic Ecology & Fresh Water Fisheries.

READ: Chapter 12.

Week 8.

Lec. 15. Tu. Oct. 9. Marine Resources. Video on Fisheries issues.

READ: Chapter 12.

Lec. 16. Th. Oct. 11. Rangelands, Confined Animal Feeding Operations.

READ: Chapter 13.

Week 9.

Lec. 17. Forestry. Tu. Oct. 16. Video.

READ: Chapter 14.

Lec. 18. Th. Oct. 18. Endangered Species. Video.

READ: Chapter 15.

Week 10.

**Lec. 19. Tu. Oct. 23 Wildlife Management (possible guest speaker)
(brief MT Review).**

Read: Chapter 16. Review Chapters 6-16 for Midterm II.

Class meeting. 25. EXAM II. (Th. Oct. 25). Covers Chapters 6-16.

PART III. WASTE, AIR POLLUTION, MINERAL & ENERGY RESOURCES

Week 11.

Lec. 21. Tu. Oct 29. Solid waste management, Video possible.

READ Chapter 17.

Lec 22. Th. Nov 1. Hazardous waste management.

READ Chapter 18.

Week 12.

Lec 23. Tu. Nov. 6. Local & Regional Air Pollution. Video.

READ: Chapter 18.

Lec. 24. Th. Nov. 8. Global Atmospheric Problems.

READ: Chapter 19.

Week 13.

Lec. 25. Tu. Nov. 13. Hard Rock Mineral Resources. Video.

READ Chapter 20

Lec. 26. Th. Nov. 15. Coal and Uranium mining.

Thanksgiving Week. No Class meetings this week....Gobble,Gobble,Gobble.

Week 15.

Lec. 27. Tu. Nov. 27 Nuclear power issues.

Read: Chapter 21.

Lec. 28. Th. Nov. 29. Oil and gas. Video on energy resources.

Week 16. Lec. 28. Tu. Dec. 4. Renewable and Alternative Energy Resources.

Lec 29. Th. Dec 6. The Future of Conservation and Review for FINAL.

READ: Chapter 22.

FINAL EXAM: December 13, 8-10 am (exam is comprehensive but stresses material after 2nd midterm to a greater extent)