Natural Resources Economics
AEC 442 001

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Room 115 Agricultural Building
Office Hours: 1:30-3:30 daily
Department of Agriculture
Lecture: 10:00 to 10:50 MWF
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Natural Resource Economics (AEC 442):

This course focuses on the use of natural resources in agriculture and uses fundamental economic principle and analysis to examine resource issues facing the agricultural industry. We will examine issues of resource utilization and valuation, considering both profit seeking and institutional setting.

Student Learning Outcomes

1) Engage the student in application of economic theory and analysis of resources use issues.

2) Learn to address natural resource utilization issues, especially those that arise because of agricultural activities using land, soil, and water.


Course Requirements

1) Readings in the textbook as specified by the syllabus

2) Examinations:
   - Exam #1 Feb. 9
   - Exam #2 March 7
   - Exam #3 April 18
   - Exam #4 May 7, 10:30 a.m
Topics

WEEK, TOPIC, and CHAPTER

I. Introduction: A way of Thinking (Ch. 1)
   Objective: Recognize important resource use issues facing agricultural industries as well as public decision makers.
   
   a) Resource Adequacy
   b) Social optimal
   c) Market failure and conflict

II. Natural Resource and Productive Capacity (Ch. 2)
   Objective: Recognize the “stock” and “flow” nature of natural resources and modeling
   
   a) Exhaustibility and Extraction

III. Resource Value and Demand (CH. 3)
   Objective: Understand that “willingness to pay” for resource services Work with economic concepts that explain demand and market allocation.
   
   a) Estimating Price
   b) Time value of money

IV. Micro foundations of Supply (Ch. 4)
   Objective: Recognize economic costs of resource use and non-use.
   
   a) Opportunity cost
   b) Classic cost behavior
   c) Producer decision making
   d) Time costs

V. Natural Resource Sustainability (Ch. 5)
   Objective: Become familiar with social concepts of “best” as involving future time periods.
   
   a) Efficiency
   b) Intertemporal optimization
   c) Equity

VI. Market and Market Failure (Ch. 6)
   Objective: Understand condition under which market fail to satisfy society.
   
   a) Supply and Demand
   b) Efficiency
VII. Natural Resource Public Policy (Ch. 7)
Objective: Understand that when markets fail, some corrective measure is needed

a) Types of public policy  
b) Property rights  
c) Government controls

VIII. Economic Analysis (C. 8 and 9)
Objective: Learn to use methods of analysis to examine the costs and benefits of resource use.

a) Cost-benefit analysis  
b) Measuring benefits and costs

IX. Applied natural resource use problems (ch. 10 – 19)
Objective: Examine specific resource use problems to understand decision making and corrective options

Classroom Procedure

AEC-442: Natural Resource Economics

1. Class Attendance

   A. Class attendance is required. The role will be checked

   B. Absence will be recorded and treated as follows: One point will be deducted from the final grade for each class absence in excess of three (3) unexcused absences.

   C. It is your responsibility to see me after class when you are late and have been marked absent.

   D. Students are expected to remain in class until I arrive or are notified that I will not be coming.

2. Examinations – Four exams will be given each semester comprising 100 percent of your final grade.

   A. Exam will include multiple-choice, fill in the blank and short answer types of questions. The forth (4th) and final exam will be partly comprehensive.

   B. Make-up exams only to those individuals who have a valid excuse and have notified me ahead of time. All make-up exam will be administered at the end of the semester

Grading: Simple average of the four (4) exams.  
Scale: A =100-90; B =89-80; C =79-70; D =69-60; F =<60.
**Academic Integrity (A-9.1)**

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

**Definition of Academic Dishonesty**

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at [http://www.sfasu.edu/policies/academic_integrity.asp](http://www.sfasu.edu/policies/academic_integrity.asp).

Students proven to have cheated on assignments, quizzes and/or exams will fail the entire semester course.

**Responsible Use of Technology:** It is expected that all students will only use cell phones, PDAs, laptop or tablet computers, MP3 players, and related devices outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop/tablet for matters unrelated to the course may be grounds for dismissal from class or other penalties.

**Acceptable Classroom Behavior:** Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic/online forums, classroom meetings, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare program [http://www.sfasu.edu/judicial/earlyalert.asp](http://www.sfasu.edu/judicial/earlyalert.asp). This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**Withheld Grades Semester Grades Policy**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Students with Disabilities**

— To obtain disability related accommodations and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Wisely Hall, Room 104, 468-3004/ 468-1004 (TDD) as soon as possible. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/)
I have received a copy of the syllabus for AEC 442, Natural Resources Economics which outlines course description, text required, assignment policy, instructor office hours, topic sequence, disability accommodations, grading and attendance policy, exam schedule and make-up exam considerations.

SIGNITURE _________________________

Date ________________

Print here ___________________