

**AREC 380A2: Environmental Economics**  
**Colorado State University**  
**Fall 2014**  
**2-3:15 pm, TR, Military Science**  
**Dr. Andy Seidl, professor**

**Office:**

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**Office hours:**

12-1 pm TR and by appointment.

**Description:**

Economic theories and analytic frameworks are developed and applied to contemporary problems of the use and protection of the natural environment.

**Required Texts:**

- Field, B. and M. Field. 2013. Environmental Economics: An introduction. 6<sup>th</sup> Edition. McGraw-Hill. 492 pages. (F&F)
- Hanley, N. and E. Barbier. 2009. Pricing Nature: Cost-benefit analysis and environmental policy. Edward Elgar. 353 pages. (H&B)

**Objectives:**

The successful student will be able to...

- Apply benefit cost analysis techniques to environmental problems and projects and evaluate their implications for developed as well as developing countries and communities.
- Assess the strengths and weaknesses of economic valuation approaches to inform decision-making.
- Evaluate the implications of a wide range of policy tools to achieve environmental outcomes.
- Evaluate and discuss the major US and International environmental policies and agreements, identifying common issues and challenges among them.

**Grading:**

The class will be graded in the following manner:

- 1) To combat the challenges of the traditional US grade scale (0-100), the following 5 point grading model (0-4) will be employed:  
A = > 3.5;  
B = 3.5 > x > 2.5;  
C = 2.5 > x > 1.5;  
D = 1.5 > x > 1.0;  
F = <1.0.
- 2) In addition, the mean grade for the course should probably be a "B." Notwithstanding the above criterion, if you are within 0.5 standard deviations of the mean, you will earn a "B." If you are more than 0.5 standard deviations above the mean, you will earn an "A" and more than 0.5 standard deviations below the mean earns a "C," etc. "+"s and "-"s will be assigned at the discretion of the instructor.

**Evaluation:**

Midterm Exams	30% of total points
Final Exam	30% of total points
Homework	40% of total points

**Exams (60% of total grade):**

Exams questions will be fill in the blank, multiple-choice, short answer, and graphical or mathematical illustrations. Information will be taken from the text and from classroom discussion. I like students to apply their theoretical knowledge to real world situations, so don't be surprised if economic analyses of current news items show up on the exams.

Many current issues are complex and require individual evaluation from a number of perspectives. In writing your exams, please restrict yourselves to the economic arguments supporting your position.

**Homework (40% of total grade):**

There will be three types of homework:

- 1) Five (5 @ 5% each) graphical and/or mathematical applications of the concepts and tools taught in class. They will be due at the beginning of class. Late submissions will be accepted until the exercise is returned to the class. Such submissions will be subject to a 10% per day decrease in total possible points obtainable.
- 2) Two (2 @ 5% each) analyses of a contemporary environmental economic issue found in a newspaper or magazine article. Submissions will provide a critical analysis of the problem using economic concepts, graphical and/or mathematical representations and be 1 page, single spaced, 11 pt font, in length. Please attach the article analyzed to the submission. Submissions will be turned in prior to Dec 4. Late submissions will receive zero credit. Spelling and grammar count.
- 3) Two (2 @2.5% each) one-page reflections (2.5% each) of an environmental economics oriented seminar you have attended during the semester. The write-up should discuss what was presented and what you learned from the presentation through an economics lens. I will mention some of the relevant lectures in class, but you are not restricted to attending one mentioned in class.

**Policies:**

These should be self-evident. However...

- 1) Issues covered in this course can touch upon deeply held and personal values. I strongly encourage you to discuss these issues both inside and outside of class. General rules of civil discourse, mutual respect and decorum should be adhered to at all times.
- 2) Please be on time. I will begin and end class on time to be respectful of your time. Please reciprocate.
- 3) Beepers, cell phones, PDAs, etc.: Either turn them off or put them on "vibrate," if you have some reason to need to have them turned on. No sort of active monitoring of these devices is allowed during exams.
- 4) Do your part. The first question Patrick will ask you when you come to office hours is "Have you read the text?" and the second question Patrick will ask you is "What do your classmates say?" The first question I will ask you is, "What did Patrick say?"
- 5) All university policies about academic honesty most definitely apply.

**Need Help?**

CSU is a community that cares for you. If you are struggling with drugs or alcohol and/or experiencing depression, anxiety, overwhelming stress or thoughts of hurting yourself or others please know there is help available. Counseling Services has trained professionals who can help. Contact 970-491-6053 or go to <http://health.colostate.edu>. If you are concerned about a friend or peer, Tell Someone by calling 970-491-1350 to discuss your concerns with a professional who can discreetly connect the distressed individual with the proper resources (<http://safety.colostate.edu/tell-someone.aspx>).

**Schedule (subject to adjustment according to class needs):**

Tues, Aug 26:	Class introductions. F&F Ch 1.
Thurs, Aug 28:	F&F Ch 2: Economy and the Environment
Tues, Sept 2:	F&F Ch 3: Basic Theory
Thurs, Sept 4:	F&F Ch 4: Basic Theory II
Tues, Sept 9:	F&F Ch 5: Economics of Environmental Quality
Thurs, Sept 11:	F&F Ch 6: Frameworks of Analysis
Tues, Sept 16:	F&F Ch 7: Benefit-Cost Analysis: Benefits; H&B Ch 2: CBA Theoretical foundations <i>Homework #1: Due before class</i>
Thurs Sept 18:	H&B Ch 3-4: Stated Preference Methods
Tues, Sept 23:	H&B Ch 5-6: Revealed Preference Methods
Thurs, Sept 25:	H&B Ch 7: Production function methods and discounting
Tues, Sept 30:	F&F Ch 8: BCA: Costs <i>Homework #2: Due before class</i>
Thurs, Oct 2:	H&B Ch 9: Valuing Ecosystem Services
Tues, Oct 7:	H&B Ch 11: Valuing habitat protection
<b>Thurs, Oct 9:</b>	<b>Review session</b>
<b>Tues, Oct 14:</b>	<b>Midterm Exam (30% of grade)</b>
Thurs, Oct 16:	F&F Ch 9: Policy analysis
Tues, Oct 21:	F&F Ch 10: Law and property rights
Thurs, Oct 23:	F&F Ch 11: Regulatory approaches
Tues, Oct 28:	F&F Ch 12: Incentive based strategies
Thurs, Oct 30:	F&F Ch 13: Incentive based strategies continued <i>Homework 3: Due before class</i>
Tues, Nov 4:	F&F Ch15, 16, and 17: US Federal Policies
Thurs, Nov 6:	H&B Ch 8: CBA in Developing Countries
Tues, Nov 11:	F&F Ch 18: Comparative environmental politics
Thurs, Nov 13:	<i>Homework 4: Due before class</i>
Tues, Nov 18:	F&F Ch 19: Economic Development and the Environment
Thurs, Nov 20:	F&F Ch 20: the Global Environment
<b>Tues, Nov 25:</b>	<b>Fall Break</b>
<b>Thurs, Nov 27:</b>	<b>Fall Break</b>
Tues, Dec 2:	F&F Ch 21: International environmental agreements
Thurs, Dec 4:	UNCSD, UNFCCC and UNCBD <i>Homework 5: Due before class</i> <i>All remaining homeworks due.</i>
Tues, Dec 9	H&B Ch 13: The strengths and weaknesses of environmental CBA
<b>Thurs, Dec 11:</b>	<b>Review session. Course evaluation.</b>
<b>Mon, Dec 15</b>	<b>Final Exam, 6:20-8:20 pm (30% of grade)</b>