Agenda Item #15-29 Effective: Fall 2015

Eastern Illinois University

New/Revised Course Proposal Format (Approved by CAA on 4/3/14 and CGS on 4/15/14, Effective Fall 2014)

1.	<u>X</u> New Course orRevision of Existing Course		
2.	Course prefix and number:ECN 5411		
3.	Short title: Sem Nat Reso and Environ Econ		
4.	Long title:Seminar in Natural Resource and Environmental Economics		
5.	Hours per week: <u>3</u> Class <u>0</u> Lab <u>3</u> Credit		
6.	Terms: X Fall Spring Summer On demand		
7.	Initial term: X Fall Spring Summer Year: 2015		
8.	Catalog course description: Focusing on the special features of natural and environmental resources, this course will deal with optimal commercial exploitation of natural inputs, such as fish, trees, and minerals, using fishery models, forestry models, and mineral extraction models, and will then extend traditional curriculum to examine environmental issues.		
9. Course attributes:			
	General education component:		
	Cultural diversity Honors Writing centered Writing intensive _XWriting active		
10.	Instructional delivery Type of Course:		
	X Lecture Lab Lecture/lab combined Independent study/research		
	Internship Performance Practicum/clinical <u>X</u> Other, specify: <u>Technology</u>		
	Mode(s) of Delivery:		
	Face to Face _X_ Online Study Abroad		
	Hybrid, specify approximate amount of on-line and face-to-face instruction		
11.	Course(s) to be deleted from the catalog once this course is approved. None		
12.	Equivalent course(s):		
	a. Are students allowed to take equivalent course(s) for credit? Yes _X_ No		
13.	Prerequisite(s): _ECN3810-Economics of Natural Resources, an Equivalent Course, or Permission of Instructor or Department Chair		
	a. Can prerequisite be taken concurrently? Yes _X_ No		
	b. Minimum grade required for the prerequisite course(s)?		

	c. Use Banner coding to enforce prerequisite course(s)? X Yes No	
	d. Who may waive prerequisite(s)?	
	No one _X_ Chair _X_ Instructor Advisor Other (specify)	
14.	Co-requisite(s): None	
15.	Enrollment restrictions	
	a. Degrees, colleges, majors, levels, classes which <u>may</u> take the course:	
	b. Degrees, colleges, majors, levels, classes which may <u>not</u> take the course:	
16.	Repeat status: May not be repeatedX_ May be repeated once with credit	
17.	Enter the limit, if any, on hours which may be applied to a major or minor:	
18.	Grading methods: X Standard CR/NC Audit ABC/NC	
19.	Special grading provisions:	
	Grade for course will <u>not</u> count in a student's grade point average.	
	Grade for course will <u>not</u> count in hours toward graduation.	
	Grade for course will be removed from GPA if student already has credit for or is registered in:	
	Credit hours for course will be removed from student's hours toward graduation if student already has credit for or is registered in:	
20.	Additional costs to students: Supplemental Materials or Software	
	Course Fee X_NoYes, Explain if yes	
21.	Community college transfer:	
	A community college course may be judged equivalent.	
	A community college may <u>not</u> be judged equivalent.	
	Note: Upper division credit (3000+) will <u>not</u> be granted for a community college course, even if the content is judged to be equivalent.	

Rationale, Justifications, and Assurances (Part I)

1.	Course is required for the major(s) of
	Course is required for the minor(s) of
	Course is required for the certificate program(s) of
	X Course is used as an elective

2. Rationale for proposal: A rising demand for the proposed area of learning and a lack of faculty member in the Department of Economics make an online offering of the course feasible for now, with the help of a former faculty member. The course can also be offered for face to face instruction when the Department acquires a regular faculty of its own.

3. Justifications for (answer N/A if not applicable)

Similarity to other courses: N/A

<u>Prerequisites</u>: Natural resource and environmental economics is a specialized course that requires some specific techniques of analysis not emphasized in most other fields in economics. Having taken an undergraduate course in the area will help to understand the graduate course better. But a student without an undergraduate background in the field can still overcome the deficiency if the instructor finds that the student has the potential to do good work in the course and therefore removes the restriction on registration.

Co-requisites: N/A

Enrollment restrictions: N/A

<u>Writing active, intensive, centered</u>: The goal is to encourage significant research for a deeper understanding of some important issues in the field. Several written assignments and a substantial term paper will be required.

4. General education assurances (answer N/A if not applicable)

General education component: N/A

Curriculum: N/A
Instruction: N/A
Assessment: N/A

5. Online/Hybrid delivery justification & assurances (answer N/A if not applicable)

Online or hybrid delivery justification: Availability of an external instructor in the face of a strong demand for the course from Economics, Sustainable energy and other departments at EIU makes it feasible to offer an online version of the course at present. If the demand is sustained from EIU students, the course can also be offered in a face to face or hybrid setting when the Department acquires a regular faculty of its own.

<u>Instruction</u>: Dr. Hui Li, a former faculty member in Economics at EIU, has shown strong interest in teaching the course for us. She has taught our ECN 3810: Environmental Economics online several times in the past.

<u>Integrity</u>: Student integrity will be closely monitored by the instructor with help, if needed, from EIU technology personnel.

<u>Interaction</u>: Interaction among students and between students and instructor is not only feasible but will be strongly encouraged by the instructor.

Model Syllabus (Part II)

Please include the following information:

1. Course number and title

ECN5411: Seminar in Natural Resource and Environmental Economics

2. Catalog description

Focusing on the special features of natural and environmental resources, this course will deal with optimal commercial exploitation of natural inputs, such as fish, trees, and minerals, using fishery models, forestry models, and minerals extraction models, and will then extend traditional curriculum to examine environmental resources.

3. Learning objectives

Students will be expected to understand models that provide answers to optimal extraction and use of natural resources under long-term sustainability assumptions. They should be able to create their own models that mimic the actual state of natural resource or energy use and to then perform model analysis to predict future scenarios under diverse policy assumptions. Critical thinking, problem solving, and communication of research will remain integral parts of the course.

4. Course materials

The following textbook will be required:

Roger Perman, Yue Ma, Michael Common, David Maddison, and James Mcgilvray. *Natural Resource and Environmental Economics*. Addison-Wesley, 4th edition, 2011.

5. Weekly outline of content:

WEEK	LECTURE CONTENTS	
1	Overview: current issues and research trends in natural resource and	
	environmental economics	
2	Fisheries: 1. A simple static model; 2. A simple dynamic model.	
3	Fisheries: 3. Alternative dynamic model; 4. fisheries regulation; 5. extensions.	
4	Forests: 1. Maximum sustained yield; ongoing private harvests; multiple-use forests.	
5	Forests: 2. Empirical forest economics; 3. deforestation and current	
	forestry management.	
6	Minerals: 1. costless production case; 2. models with extraction costs; 3.	
	competitive equilibrium with Hotelling costs.	
7	Minerals: 4. Heher's interpretation of model with technical progress; and midterm	
	exam.	
8	Non-market resources: 1. revealed vs. stated preferences.	
9	Non-market resources: 2. Hedonic property value and wage methods; 3. travel cost	
	model.	
10	Non-market resources: 4. Random utility models; 5. Contingent valuation	
11	Common pool resources: 1. Property rights regimes; 2. open access and its dilemma.	
12	Air: 1. Efficient control of pollution; 2. Tradable pollution permits.	
13	Water: 1. Depletion and renewal; 2. Policies for sustainable water management.	
14	Global Climate: 1. Causes and consequences of climate change; 2. Policy responses	
	to climate change.	
15	Paper presentation: 15-20 minutes oral presentation of research	
	project.	

6. Assignments and evaluation, including weights for final course grade.

Assignments	10 percent
Midterm Exam	25 percent
Research Paper	20 percent
Participation and Presentation	10 percent

Final Exam 35 percent **Total** 100 percent

7. Grading scale: 90-100%: A 80-89%: B 70-79%: C 60-69%: D 59% or less: F

8. Correlation of learning objectives to assignments and evaluation. The midterm and final exams, among other things, will closely assess whether students have fulfilled learning objectives.

Date approved by the department or school: 16 February, 2015
Date approved by the college curriculum committee: April 3, 2015
Date approved by the Honors Council (if this is an honors course):

Date approved by CAA: NA CGS: