ECON 458 O: Project Evaluation and Resource Management
Tentative Syllabus

Course description: Many economies face the dilemma of how to develop without degrading the environment. This course extends traditional benefit-cost analysis, policy evaluation, and other tools of microeconomics to show how economic development in Hawaii, the U.S. and Asia can be pursued in harmony with environmental stewardship. Topics include climate change, pollution, deforestation, biodiversity, water management, valuing and conserving Hawaii’s environmental resources, road pricing, rail, sustainable development, and win-win environmentalism.

Learning objectives: (1) Distinguish and critically evaluate alternative approaches to resource management; (2) Apply microeconomics to evaluate policies for pollution control, climate change mitigation, recycling, water resource management, pollution, biodiversity, invasive species control, the conservation/restoration of natural capital (3) Articulate the benefits and costs of environmental policies and expenditures (4) Recognize and diagnose appeals to emotion vs. reason. (5) Calculate present values using spreadsheets. (6) Create, organize, and give an effective economic presentation.

Prerequisite: Econ 301 (Intermediate Micro) or instructor’s permission.

Office hrs: Tue, 1:30-3 or by appt. (jimr@hawaii.edu)

Text: Environmental and Natural Resource Economics, a Contemporary Approach (3rd ed.), by Jonathan Harris and Brian Roach

References:
- Roumasset, Burnett and Balisacan, Sustainability Science for Watershed Landscapes
- Zeoli (2008). The 7 Principles of Public Speaking

Laulima resources: Some of the references in this syllabus will be uploaded on Laulima at https://laulima.hawaii.edu/portal. Provide your UH user id and password. Click the menu tab Econ-458. Click the “Resources” tab on the left.

Learning objectives (1) Learn how the economy and the environment can be jointly managed for the betterment of each; (2) learn the theory and practice of benefit-cost analysis; (3) apply microeconomics to pollution control, climate change mitigation, recycling, water resource management, invasive species control, the conservation/restoration of natural capital, and other problems involving the socio-economic-ecological system.

Tentative outline of topics:

   A. When are markets efficient?
   B. When are they not and what can be done?
   C. What about the poor?
   D. Reading
      1. Skim Harris-Roach chs 1-2; read ch 3.
      3. Roumasset, Laulima
         i. Welfare Economics: Axiomatic Approach to the Minimal Role of Govt.
         ii. Letting Go of Fear
         iii. Coasean Mission

II. Common property and public goods, Harris, ch 4.

III. Natural resources, ecology, and sustainable development

1 Other readings may be added as needed.
A. Harris, chs 5, 7, 12, 20; skim 13.
B. R’set, Fesharaki, and Isaac. Oil Prices w/o OPEC: A Walk on the Supply Side.
C. Roumasset, “The Yin and Yang of Sustainable Development: Abundance Through Scarcity”

IV. Benefit-cost analysis, environmental valuation and accounting, and Hawaii’s environomy
A. Harris, ch 6, 8.
B. Boadway and Wildasin, Public Sector Economics, ch 8.
D. R’set, Fixed Rail: Another Case of Blackhole Economics.

V. Population and the Environment
A. Harris, ch 10

VI. Renewable resources, chs 14, 15.
VII. Pollution and recycling solutions.
A. Ch. 16; skim 17 but w/ special attention to boxes.
B. Recycling

VIII. Climate change and other international environmental issues
A. H, ch 18, 19, 20.
B. Tarui, N. Discounting for Mitigation of Climate Change (PPT, Lulima)
C. Stern Review: The Economics of Climate Change (Executive Summary)*

Course requirements and grading

Project proposal (written and oral)iii 10%
Final project reportiv 20%
Other Oral report(s)v 10%
Quizzesvi 25%
Finalvii 25%
Homework & Citizenshipviii 10%

ii Recommended only (also indicated by *).
iii Any topic related to text, lectures, and/or syllabus. Local relevance is encouraged, not required. Proposal: title, motivation, policy question, what kind of evidence will you provide and/or analysis you will conduct, how that will shed light on policy question). Topic presentation: Sept 26. Revised proposal due on Oct 1.
iv Power Pt presentation. Class presentations must be scheduled in advance for Nov or early Dec (1st or 3rd). Summary of your presentation (revised PPT) due on penultimate day of class, along with short paper to supplement the PPT: two page max of text; five pages max including figures and references.
v An additional report will be assigned based on text or outside reading. Students may give more than one report for extra credit.
vi The first quiz (beginning of week 2) is for one point. Following quizzes (tentatively beginning of week 5, middle of week 9, and end of week 13) are 8 pts each. No alternative quiz times will be offered except in extraordinary cases. Students may be excused a priori for illness or non-health emergency with appropriate verification. Otherwise, missed exams are recorded as zero points. Late registrants are responsible for all course content and exams. Appeals for grade changes must be written. (Write ideal answer for the item you are appealing and why you think your score should be increased.) Students are encouraged to meet w/ instructor to learn how to do better on exams in lieu of appeals.
vii Please see UHM Schedule of Classes. Same rules regarding missed exams apply.
viii Contributions to the learning community (including class participation, additional presentations, facilitating availability of course materials, bringing pertinent current articles, websites etc. to class’s attention).