

## September 2019

### Fall 2019 BEM/Ec/ESE 119: Environmental Economics

Nature of course: This course provides a survey from the perspective of economics of public policy issues regarding the management of natural resources and the protection of environmental quality. The course covers both conceptual topics and recent and current applications.

The course web page is on Caltech Moodle. <https://courses.caltech.edu/course/view.php?id=3516>.

Instructor: John Ledyard

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Office Hours: **I need to make specific hours.** By appointment – use email to make appointment.

Assistant: Barbara Estrada, Baxter 111

Prerequisite: Ec 11 or equivalent.

Text: Nick Hanley, Jason Shogren, and Ben White, *Environmental Economics in Theory and Practice*, 2<sup>nd</sup> Edition, Macmillan International. Available on Amazon to rent (\$31.98), used (\$56.86) or buy (\$71.98). This is also on reserve at the library.

Additional Reading may be assigned from time to time. These will be available on the course web page.

Experiments: We will occasionally run experiments in class so you have hands-on experience with the economic forces in various situations. We will use MobLab to run these experiments. (See the MobLab Student Guide for instructions on registering and participating. There is no cost to you for this.

Grade: Your grade will be based 60% on homework sets, 10% on experiment participation and 30% on a final. There will be 4 homework sets during the course. Each set will have a due date and time. No answer sets will be accepted after this time without an excuse from the Health Center or Dean's office.

Collaboration Policy: Collaboration on homework assignments is encouraged. You may consult outside reference materials, other students, the TA, or the instructor, but you must cite any use of material from outside references. All solutions that are handed in should be written up individually and should reflect your own understanding of the subject matter at the time of writing. No collaboration is allowed on the final exam.

Schedule: (Expected number of weeks on topic in parens)

1. Introduction (1/4)
2. Foundations: Social Choices and Market Outcomes (1/2)
3. Time and Sustainable Development (1/4)
4. Market Failure (1)
5. Remedies for Market Failure (2)
6. Pollution Taxes and Permits (1/2)
7. Global Public Goods (1/2)
8. Non-renewable resources (2)
- Week 8. Renewable resources (1)
9. Climate (1)
10. Environmental Valuation (1)