Environmental economics studies the intersection of the social and physical sciences. Social sciences study how individuals and societies interact. In particular, Economics is the study of how societies allocate scarce resources. The physical sciences define relevant resource constraints for each issue. Environmental problems such as climate change, tropical deforestation and pollution all fit this description. The contribution of economists is environmental policy. The course begins with theory and methods and ends with topics and applications. The course material is divided into five parts, outlined below.

**Course Requirements:**
The required text is: *Environmental Economics for Tree Huggers and Other Skeptics* by William Jaeger. The ISBN is: 978-1559636681. The text lists for $35, but used copies are even cheaper. Additional readings will be handed out in lecture depending on which topics we choose to emphasize. These will typically be short newspaper or magazine articles illustrating applications of the theoretical material covered in lecture.

This course meets Tuesday and Thursday from 9:30-10:45 am in Bolton B95 (in the basement) beginning Tuesday, September 3rd and ending Thursday, December 12th. There is no class on Thanksgiving, Thursday, November 28th.

There will be two exams. The midterm will be on Thursday, October 10th and the final is from 7:30-9:30 am on Thursday, December 19th. The final exam is not explicitly comprehensive. Both exams will be held in Bolton B95. The exams will be a combination of short answer and numerical problems.

The problem sets will cover the material from the lectures and the text. Their purpose is to prepare you for the exams so they will emphasize short answers, problem solving and explaining the important topics. Problem sets will count 10% of your grade. Classroom participation and attendance will count 10%. Each exam will count 40%.

The material builds upon itself, so keeping up to date with the readings and lectures is very important. Typically, lectures will extend the results from the previous class. Missing lectures will greatly enhance the difficulty of the course. If there are concepts that you find confusing, please ask for help in office hours.

**Office Hours:**
My regular office hours are Tuesday and Thursday from 11:00-12:00 in 888 Bolton. I am available for appointments if you can’t make these times. Please use my office hours if you need help.

**Math:**
We will be using some basic algebra to solve problems in lecture and the problem sets. I will review some of the math we will be using as needed. Examples include dividing fractions, calculating percentage changes, computing the area of a triangle, and solving two equations with two unknown variables.

**Policies and Procedures:**
Please read the University’s policies at: [http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf](http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf). Information on academic misconduct can be found at: [http://www.uwm.edu/Dept/Acad_Aff/policy/academicmisconduct.html](http://www.uwm.edu/Dept/Acad_Aff/policy/academicmisconduct.html)

Accommodations will be made for students with disabilities and observance of religious holidays. The University’s calendar is at: [http://www.uwm.edu/Dept/Acad_Aff/policy/](http://www.uwm.edu/Dept/Acad_Aff/policy/). Please inform me of this need as soon as possible so that we can make the appropriate arrangements. According to University regulations, students may drop the course until the end of the 8th week of classes.

Please turn off all cell phones before lecture.

**Course Outline:**

I. **Efficiency**
   1) Trade-offs, efficiency and demand (chapter 2)
   2) Production, profit and supply (chapter 3)
   3) Dynamic efficiency (chapter 4)
   4) Market failures (chapter 5)

II. **Sustainability**
   1) Economists’ definitions (chapter 6)
   2) Economic growth and development (chapter 7)

III. **Policy**
    1) Property rights and the Coase Theorem (chapter 9)
    2) Pollution policy (chapter 10)
    3) Natural resource management (chapters 11 and 12)
    4) Policy failures (chapter 13)

IV. **Valuation**
    1) Environmental valuation (chapter 14)
    2) Policy evaluation (chapter 15)

V. **Topics**
   1) Climate change
   2) International environmental agreements
   3) Geoengineering
   4) Renewable energy
   5) Trade and the environment (chapter 8)

Some potential readings for the topics


