Billy Mertens ECON 12 mertens@colorado.edu canvas.colorado.edu

T, TH 8:35-9:10am and 12:20-1:55pm, and by appointment (please give 2 weeks' notice for appointments).

This course is designed to give you an introduction to the implications of natural resources as economic concepts. It presents theories of efficient utilization of natural resources and discusses issues related to current practices of use of resources. We will study natural resources used in the economy, the value of natural resources to society, and the allocation of renewable and non-renewable resources. We also discuss issues of sustainability, conservation, and preservation. The course extensively uses graphical analyses and some mathematical models. In addition to learning about the methods that economists use to analyze natural resource problems and issues, you will be challenged to frame problems in economic terms and propose solutions to these problems.

A much more detailed outline of covered material is posted separately.

Students must have completed ECON 1078, 1088, 2010, 2020, 3070 and 3818. I assume that you did not only take the class, but also that you understand and remember the content. It is important that you fulfill the prerequisite you take this course, and understand the materials in the prerequisite. If you have any uncertainty as to whether you are under or over qualified to take the course, please talk to me ASAP. The prerequisites must be strictly enforced.

I <u>will</u> use calculus in the course. Materials learned in 3070 will form a foundation for what we will do in 4535. I will cover the relevant micro theory in my lectures but cover it more quickly than when it was presented to you in intermediate microeconomic theory. It is important that you have successfully completed Intermediate Micro Theory. If you are an environmental studies major who has doubts about their knowledge of economics, talk to me—soon.

While this is not a micro-theory course, economics without theory is not economics. You will need micro theory to understand and explain the allocation of natural resources. Some of the theory and terms you will need to know include: the theory of the firm, the theory of the consumer, efficiency, when the market equilibrium will and won't be efficient, market failure, types of market failures, corrections for market failure, discounting and present value, public goods, property rights, common property, externalities.

A strong math background will make this course easier. Math involves rigor and a way of thinking that facilitates economic thinking. In addition, graphs and simple mathematical descriptions of economic problems provide insights that would be difficult to convey with only words.

Prerequisite Quiz

To be sure you are prepared for the material to be covered in this course, you will take a preliminary quiz. The quiz

This course is a little more traditional than many of the other classes I teach. Lecture is still the primary component, but group assignments and discussions are taking on a slightly larger role. One of the most important changes from prior semesters is that all exams will be cumulative, and we will spend at least a little time reviewing for each exam and even more time going over the exams in class. A little more detail on these systems is given below:

- 1.! Lecturing: explaining difficult material not easily learned on your own with text, groups, etc.
- 2.! Exams: exams should be learning tools as well as assessment tools! We will go over each exam in depth in class. Reviewing exams is one area where in-class discussion and explanation are most effective. Just reading answers on a key has been shown to be one of the worst ways to learn material. Therefore, exam reviews will be the one area of class where notes, associated pictures or keys will be posted.
- 3.! Group-Led-Discussions: we will cover both classic and more recent relevant articles from scholarly journals. Group-led-discussions are a mix of presentations and discussions. The more creative you can be with these, the more you will get out of them (and the better will be your grade). Finding interesting ways to engage the class in discussion of these articles will teach you critical skills that will not only solidify the current information but will also aid in your learning for other classes. Presentation of material is one of the most instructive learning systems because:
 - a. If you are going to inform others about what you know, you must first fully understand it yourselves. If you cannot explain a concept to others you may not fully understand it yourself.
 - b. You must research the topic, which may expose you to new ideas and sources of material. These sources could help in other coursework.

C.

There are many studies showing a clear relationship between class attendance and student achievement. For this reason, there is a strict attendance policy for this course. Daily attendance will be taken. If you miss for any reason more than 20% of the course (more than 6 days), then you will

Hono Code

The Boulder campus has an <u>Academic Integrity Policy</u> and a <u>student Honor Code</u>; individual faculty members are expected to familiarize themselves with its tenets and follow the approved procedures should violations be perceived. The campus has been working diligently to make this process work better and to provide guidance on 'gray areas' at the <u>Honor Code website</u>.

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the academic integrity policy. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, resu