ECON 3480: Environmental and Natural Resource Economics  
Fall Semester 2014  
MW: 12:30-1:45, RCOB 1308

Instructor: Dr. James H. Murphy
Office: 1312 Miller Hall
Telephone: (678) 839-4774
Contact Hours: Office, MW: 12:00-12:30, 1:45-2:00, 3:15-3:30, 4:45-6:45; by Appointment; and by email, T Th: 7:00 p.m.- 9:00 p.m.
Email: jmurphy@westga.edu
Prerequisites: Econ 2106.

Course Description: This course surveys the issues arising from the interaction of economic and ecological systems, the suitability of the market mechanism to allocate natural and environmental resources, and policy options when markets fail.

Course Requirements: There will be a mid-term (25%), a class project (15%), a paper/presentation (10%), occasional in-class or homework exercises (20%) and a final examination (30%).

Missing an examination will result in a "0" for the particular examination. Exceptions will only be granted with the instructor's prior consent in the case of highly extenuating circumstances beyond the student's control.

Skills Developed: Communication (both written and oral), critical thinking skills (including the application of quantitative analysis), the ability to apply microeconomics to business and public policy issues.¹

Grading: NO CURVE.

A: 90-100 percent  D: 60-69 percent  
B: 80-89 percent  F: Below 60 percent.  
C: 70-79 percent

Dates to Note:  
Midterm: Monday, October 13. The mid-term will cover whatever material we’ve covered up to this point.

Drop Day: The last day to withdraw with a "W" is Friday, October 17. Any withdrawal after this point will receive an "I", "WF" or "F" in accordance with University policy.

Final Exam: Wednesday, December 10, 11:00 a.m.-1:30 p.m.

¹These skills encompass several of the Department of Economics Learning Goals (LG)
COURSE OUTLINE

SECTION 1. INTRODUCTION

SECTION 2. POLICY GOALS (NORMATIVE CRITERION)
   2.1 Rival Demand/Consumption
   2.2 Supply/Production
   2.3 Static Efficiency (One Period)
   2.4 Non-rival Demand
      Problem 1
   2.5 Double-Auction Demonstration
      Problem 2
   2.6 Allocative Efficiency between Competing Uses
      Problem 3
   2.7 Uncertainty
      Problem 4
   2.8 Discounting/The Time Value of Money
   2.9 Dynamic Efficiency
      Problem 5
   2.10 Sustainability

SECTION 3. ENVIRONMENTAL POLICY (POSITIVE ECONOMICS)
   3.1 Market Failure
      Problem 6
   3.2 Non-market Valuation
      Problem 7
   3.3 Environmental Policy Tools
      Problem 8
   3.4 Policy Failure
   3.5 Environmental Federalism

SECTION 4. NATURAL RESOURCE ECONOMICS (APPLICATIONS)
   4.1 Introduction/Resource Scarcity Overview
      Stocks versus Flows
      Resource Taxonomy
      Reserves
   4.2 Non-renewable Resources
      Problem 9
   4.3 Renewable Resources
      Problem 10
SECTION 5. TOPICS AND APPLICATIONS

5.1 Climate Change
5.2 Energy Policy
5.3 Transportation
5.4 Mineral Economics
5.5 Water Resources
5.6 Land Economics
5.7 Forest Resources
5.8 Fisheries
5.9 Recreation
5.10 Wildlife Management
5.11 Bio-diversity
5.12 Development