ECON 430 and 430G—ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS Western Kentucky University Syllabus

Instructor: Jacob P. Byl Time: Online

Term: Summer 2020 Lectures: Online on Blackboard

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Office Hours: By phone, or via Zoom

By appointment

COURSE DESCRIPTION: This course is designed to help students think about environmental issues in an analytical way—specifically, using the framework of economic analysis. We will look at how pollution affects people and learn ways to quantify that. We will also look at the costs of reducing pollution, and how to balance those against the benefits of a cleaner environment. The tools of environmental economics will be used to look at issues that span from very local—like a neighbor who burns trash in his yard—to global. Examples from current events will be used to explain why it is an important topic in need of more thinkers who can combine passion and analytical skills.

PRE-REQUISITES: ECON 150, ECON 202, or ECON 203. Special permission by the instructor may also be given for students with appropriate backgrounds and training.

MATERIALS: We will be using the textbook <u>Environmental Economics</u>: An <u>Introduction</u> 7th Edition by Field and Field. Older versions, especially the 5th and 6th editions, are suitable substitutes and can be found online at substantial discounts from the list price. As this online course relies on you reading the material, you will need the book to successfully complete the course.

OTHER MATERIALS: Lecture notes, homework, quizzes, articles, and other course materials will be posted on Blackboard. I encourage you to check the Blackboard site regularly. You may also want to change your default settings to receive email notifications whenever there is an update to the course.

GRADING: Final grades for the course will be based on: participation and homework assignments (20%) quizzes (50%) and a final paper (30%). There will be at least two opportunities for extra credit. Grades are set on a standard 100-point scale with: A: 90% to 100%; B: 80% to 89%; C: 70% to 79%; D: 60% to 69%; F: below 60%.

QUIZZES: Quizzes will test the core concepts of the class on a weekly basis as we move through the material. There will be 5 quizzes each worth 10% of the course grade.

FINAL PAPER: The final paper for this course will be on a topic of your choosing, with a list of suggested topics posted on Blackboard. I encourage you to pick a topic that you are passionate about—if it's not on the suggested topics list, email me and I will confirm that it has an appropriate scope for this writing task. A more detailed description of the requirements will be posted on Blackboard, but in general this is a chance for you to show that you can apply economic tools to an environmental issue in a 8 to 12 page paper. You will have the opportunity to submit an outline or draft of the paper at the end of week 3 to get feedback from me on how to improve the paper. The final paper will be due **Friday, June 12**.

LEARNING OBJECTIVES: This course is designed to satisfy the following learning objectives:

- 1. Analyze environmental issues on local and global scales using economic tools.
- 2. Examine the local and global interrelationships of pollution to the air, water, and land.
- 3. Evaluate the consequences of decision-making on local and global scales by evaluating alternative environmental policies.

CHEATING: Cheating is not tolerated at Western Kentucky University and will be penalized in accordance with the policies of the University and the Department of Economics.

ADA ACCOMODATION: In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. Please do not request accommodations directly from the instructor without a faculty notification letter from the Student Accessibility Resource Center.

TITLE IX/ DISCRIMINATION AND HARASSMENT: WKU is committed to supporting faculty, staff, and students by prohibiting discrimination, harassment and/or sexual misconduct based on sex/gender. WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator.

Additional information on ADA accommodation, Title IX, and other topics is available at www.wku.edu/syllabusinfo/

COURSE OUTLINE:

1. Introduction

Week of May 18

Chapter 1: Topic Overview

Chapter 2: Economics and the Environment

Chapter 3: Benefits, Costs, Supply, and Demand

2. Analytical Tools

Week of May 25

Chapter 4: Markets, Externalities, and Public Goods

Chapter 5: Economics of Environmental Quality

Chapters 6: Frameworks of Analysis

3. Environmental Policy Analysis

Week of June 1

Chapter 7: Benefit-Cost Analysis—Benefits

Chapter 8: Benefit-Cost Analysis—Costs

Chapters 9: Criteria for Evaluating Policies

Chapter 10: Decentralized Policies

4. Local to Global

Week of June 8

Chapter 12: Emission Charges and Subsidies

Chapter 17: State and Local

Chapter 15: Federal Air Pollution Control

Chapter 19: International Environmental Agreements