**University of Mary Washington**

**Course Syllabus**

**Environmental Economics – ECON 331**

**122 Monroe Hall**

**Mondays, Wednesdays & Fridays 3:00 – 3:50 p.m.**

**January 9 – April 28, 2023**

Instructor: Tim Schilling (You can call me Mr. Schilling)

Phone: Cell (preferred) 804-304-4226

(emergencies only – I prefer to be contacted by email.)

Office: Econ House, B (Basement) 04, Econ House, 1004 College Avenue

E-mail: [tschilli@umw.edu](mailto:tschilli@umw.edu)

Office hours: M W & F, 12 noon – 1:15 p.m. (open door)

Books: *Environmental Economics and Natural Resource Management* by David Anderson

5th Edition, Routledge Publishing

Two videos from the Journey to Planet Earth series: *Future Conditional* and *The Urban Explosion* will be shown in class.

There will also be numerous articles assigned. They can be found online on the course Canvas under the Files tab in the Articles folder.

Objectives: Students will apply key economic concepts and analysis to issues related to the environment and natural resources.

Grades: Grades will be determined as percentage of total possible points. Points are awarded as follows:

Midterm exam 125

Final exam 300

Unit tests 3 at 75 points each 225

Homework 8 at 30 points each 240

**Total points 890**

The grading scale is as follows:

94 – 100% = A 90 – 93% = A-

87 – 89% = B+ 83 – 86% = B 80 – 82% = B-

77 – 79% = C+ 73 – 76% = C 70 – 72% = C-

1. – 69% = D+ 63 = 66% = D 60 – 62% = D-

<60% = F

Exams will be a combination of multiple-choice, essay and/or short answer questions. Quizzes will be multiple-choice and will focus on material covered in the text. Unit tests will be multiple-choice but will include material from various readings and discussions, as well material from the text. There are no makeup exams, tests or quizzes. So if you know you’re going to be absent, see me well in advance to work something out. Also, the final exam will only be given on the date and time indicated on the schedule.

Class participation and homework are important. If you do not do your homework, if you show that you are not prepared during class discussions, it will be reflected in that portion of the grade.

Homework generally consists of questions/problems from the text, but may include short essays on readings or related topics handed out by the instructor. These will usually be related to material taken from press, internet, and other media. Class participation will consist of discussion is based upon your participation in discussion of new material, as well as homework and observations/questions regarding current events.

Finally, I work as an adjunct for several universities (including UMW). My time is scheduled very tightly. I do not accept late homework and I only allow quizzes and exams to be made up if arrangements are made prior to the date of the event.

Honor Policy: The University of Mary Washington Honor Code is in effect for all assignments, quizzes and exams. Students will indicate their adherence to the code on all assignments, quizzes and exams.

Disability Students who have an acknowledged disability requiring some accommodation

Accommodation: in homework or evaluation situations can see me. Students will need a disability statement from the appropriate campus office.

Covid Policy All students are expected to adhere to the policies and expectations of the University to Statement: mitigate risk and support the health and safety of the UMW community, including

refraining from attending class if experiencing symptoms. A comprehensive set of the current policies and expectations can be found at the [COVID-19 information page](https://www.umw.edu/returntocampus/).

Changes to this requirement will be communicated to the campus community by the COVID-19 Director and updated at the university’s COVID-19 information page.

No food is permitted in classrooms and other instructional areas; drinks permitted in closed containers only and not in areas where expressly prohibited.

Failure to comply with UMW policies and expectations will result in disciplinary action consistent with the Student Code of Conduct.

**Date** **Topic and Readings**

**Week 1**

Monday, January 9 Introductions

*An Economist’s Guide to Climate Change Science*

by Solomon Hsiang and Robert Kopp, The Journal of Economic

Perspectives

Wednesday, January 11 The Big Picture

Chapter 1, Text

Friday, January 13 The Big Picture (continued)

**Week 2**

Monday, January 16 NO CLASSES

MLK Holiday

Wednesday, January 18 Market Failure

Chapter 3, Text

Friday, January 20 Efficiency and Choice

Chapter 2, Text

**Week 3**

Monday, January 23 *Adam Smith Meets Climate Change* by Ian Ayres, SLATE

*People vs. Malthus: Population Pressure, Environmental Degradation*

*and Armed Conflict Revisited* by Henrik Urdal, Journal of Peace Research

*Environmental Application of the Coase Theorem* by Tatyana Derugina,

Frances Moore and Richard S. J. Tol, Environmental Science and Policy

*Rawls and Sustainable Development* by Gail E. Henderson, McGill

International Journal of Sustainable Development Law and Policy

Wednesday, January 25 Video: *Journey to Planet Earth – Future Conditional*

<https://fod-infobase-com.umw.idm.oclc.org/p_ViewVideo.aspx?xtid=210602>

Friday, January 27 Video: *Journey to Planet Earth – Future Conditional*

<https://fod-infobase-com.umw.idm.oclc.org/p_ViewVideo.aspx?xtid=210602>

**Week 4**

Monday, January 30 *The Failure of Market Failure* by Richard O. Zerbe, Jr. and Howard E.

McCurdy, Journal of Policy Analysis and Management

*The Economics of Climate Change* by Sanval Nasim, Dawn

Wednesday, February 1 The Role of Government

Chapter 4, Text

Friday, February 3 Trade-offs and the Economy

Chapter 5, Text

**Week 5**

Monday, February 6 Test 1, Chapters 1 – 5

various articles

and *Journey to Planet Earth – Future Conditional*

Wednesday, February 8 Environmental Quality

Chapter 6, Text

Friday, February 10 Energy

Chapter 7, Text

**Week 6**

Monday, February 13 *The Dystopian Lake Filled by the World’s Tech Lust* by Tim Maughan,

BBC

*Electric Vehicles Dirty Secret*  by Lauren Laughlin, Dow-Jones Institutional News

*Millions of Electric Car Batteries Will Retire in the Next Decade* by

XiaoZhi Lim, The Guardian

*Battery Metals Rush Is Just Starting* by Stephen Wilmot, Dow-Jones

Newswire

*The Efficiency Dilemma* by David Owen, The New Yorker

Wednesday, February 15 Sustainability

Chapter 8, Text

Friday, February 17 Population, Poverty and Economic Growth

Chapter 9, Text

**Week 7**

Monday, February 20 *Big Companies Salvage Ocean Trash* by Emre Peker, Dow-Jones

Institutional News

*An Ocean Plastics Field Trip* by Rowan Jacobsen, Outside

*Global Inequality and Climate Change* by Noah Diffenbaugh and

Marshall Burke, Stanford Woods Institute for the Environment

*Nigeria Is Oil Rich and Energy Poor* by Hanna Ziady, CNN

Wednesday, February 22 Video: Journey to Planet Earth: The Urban Explosion

<https://fod-infobase-com.umw.idm.oclc.org/p_ViewVideo.aspx?xtid=210596>

Friday, February 24 Video: Journey to Planet Earth: The Urban Explosion

<https://fod-infobase-com.umw.idm.oclc.org/p_ViewVideo.aspx?xtid=210596>

**FEBRUARY 27 – MARCH 3 SPRING BREAK**

**Week 8**

Monday, March 6 *The 100-million City: Is 21st Century Urbanization Out of Control?*

by John Vidal, The Guardian

*Urban Growth and Climate Change* by Mathew E. Kahn, NBER

*Not in My Back Yard: The Peripheries of Urban Areas Are Refusing to*

*Become the Dumping Grounds of Municipal Waste* by Economic and

Political Weekly

Wednesday, March 8 Biodiversity and Valuation

Chapter 10, Text

Friday, March 10 International and Global Issues

Chapter 11, Text

**Week 9**

Monday, March 13 *Rare Plant May Prevent the First Lithium Quarry in the U.S* by Ian Morse,

New Scientist

*The Amazon: from the Environmental Economy* by Luis Custodio, NF

Newswire

*The Cost of Greenhouse Gas Emissions* by Kenneth Gillingham and James Stock, Journal of Economic Perspectives

*Solar Power’s Land Grab Hits a Snag: Environmentalists* by Jim Carlton, The Wall Street Journal

Wednesday, March 15 Test 2, Chapters 6 – 11, video and readings

Friday, March 17 Review for Mid-Term Exam

**Week 10**

Monday, March 20 Mid-Term Exam, Chapters 1 – 11, videos and readings

Wednesday, March 22 Perspectives on Environmental Policy

Chapter 12, Text

Friday, March 24 *Beliefs, Politics and Environmental Policy* by Anthony Millner and

Helene Olliver, Review of Environmental Politics and Policy

*Making a Difference? Some Perspectives on Environmental Research*

*and Policy*  by Susan Owens, Transactions of the Institute of British

Geographers

**Week 11**

Monday, March 27 CLASS CANCELLED

**Week 11 (continued)**

Wednesday, March 29 *Impact of Profitability, Certainty and Degree of Fine* by

Clark/Gunnarsson/Skeldon/Amshoff, Journal of Business

Communication

*Policy Uncertainty Discourages Innovation* by Lucas Davis, The

Conversation

Friday, March 31 Natural Resource Management: Renewable Resources

Chapter 13, Text

**Week 12**

Monday, April 3 Natural Resource Management:

Depletable and Replenishable Resources

Chapter 14, Text

Wednesday, April 5 *New Formula Assigns Dollar Value to Natural Resources,* Arizona State

University

*The Role of Prices in Conserving Critical Natural Capital* by Joshua Farley,

Conservation Biology

Friday, April 7 Environmental Dispute Resolution

Chapter 15, Text

*Renewable Resources and Conflict* by the United Nations and the

European Union

**Week 13**

Monday, April 10 *Water Wars* by Jesse Newman, The Wall Street Journal

*Stress on the Nile* by Justin Scheck and Scott Patterson, The Wall

Street Journal

*Fire Begets More Fires* by Jon Elmont, Dow-Jones Institutional News

*Brazil’s Unusual Bid to Curb Deforestation* by Paulo Trevisani and

Juan Feraro, The Wall Street Journal

Wednesday, April 12 Morals and Motivation

Chapter 16, Text

And *Ethical Systems and Economics*

Friday, April 14 *Ethics and Environmental Policy in Democratic Governance*

by Robert Bartlett and Walter Baber, Public Integrity

*On the Challenges of Intergenerational Justice and Climate Change* by

Karl Franzen, ResearchGate

**Week 14**

Monday, April 17 Test 3, Chapters 12 – 16

*Ethics and Environmental Policy*

and *Challenges of Intergenerational Justice and Climate Change*

Wednesday, April 19 Review for Final

Friday, April 21 Last Minute Discussion

**Week 15**

**Friday, April 28, 3:30 – 6:00 p.m. FINAL EXAM**