

**THE UNIVERSITY OF THE WEST INDIES**  
**MONA CAMPUS**  
**Department of Economics**  
**Kingston 7**  
**Jamaica, W.I.**

**ECON9012: Advanced Environmental and Resource Economics**

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Academic year:	Semester 1, 2020/2021
Pre-requisite:	Advanced Microeconomic Theory I (ECON9001) and II (ECON9002); Econometrics I (ECON6003) and II (ECON6026) and/or consent of the lecturer.
Lecture hours:	Fridays 10am – 1pm (online)
Lecturer:	Dr. Alrick K. Campbell
Email address:	<a href="mailto:alrick.campbell02@uwimona.edu.jm">alrick.campbell02@uwimona.edu.jm</a>
Office location:	Alister McIntyre Building, E207
Office hours:	Tuesdays 12 – 2pm, Thursdays 12 – 1pm

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### Course Description

In this first part of the two-part environmental Ph.D. sequence, students will survey theoretical and empirical papers related to environmental policy design and will be exposed to a selected set of analytical techniques and econometric tools that are used to evaluate public policies aimed at environmental management.

### Learning Objectives

Upon successful completion of the course, students will be able to:

1. critically evaluate some of the classic theoretical and empirical papers and models in the environmental economics literature;
2. propose ways in which these papers can be extended and/or improved;
3. apply techniques and tools learnt to major environmental and natural resource policy problems; and
4. use the tools to write a dissertation topic proposal and to engage in more advanced research in environmental economics.

### Course Content

This course consists of nine (9) units. The units to be covered in this course are as follows:

1. Introduction, Externalities and the Coase Theorem
2. Estimating the Benefits and Costs of Environmental Policy

- (a) Pollution, health and productivity
  - (b) Revealed preference methods: hedonics and recreational demand models
  - (c) Stated preference methods
  - (d) Estimating regulatory costs
3. The Economics of Pollution Control and Policy Instrument Choice
    - (a) Market-based policy instruments
    - (b) Instrument choice: uncertainty, pre-existing distortions, and dynamic effects
    - (c) Applications of market-based approaches
  4. Climate Change
    - (a) Climate change impacts
    - (b) Mitigation: benefits and costs
    - (c) Climate adaptation
  5. Energy Use and Efficiency
  6. Distributional Effects of Regulation and Environmental Justice
  7. Environmental Regulation and Enforcement
  8. Oil and Gas Extraction
  9. Renewable Resources and Open Access

## Mode of Delivery

Three lecture hours on a weekly basis.

## Assessment

To establish student understanding of the course material and encourage ongoing engagement in the course, several assessment strategies will be utilised throughout delivery of this course. The assessment summary is provided below:

Assessment Items	Mode of Submission	Weighting
Weekly seminar contributions / participation	Online	30%
Referee report	Online	20%
Research proposal	Online	50%
<b>Total</b>		<b>100%</b>

## Student Responsibility

Your regular attendance at lectures and participation is expected. All communication about this course will be made through the OurVLE course site and/or your official email provided by the University. Announcements made via OurVLE and your official email are deemed to be made to the entire class.

## **Resources**

There is no formal textbook for this course. All required reading material and journal articles will be made available on the OurVLE course site.