

## Ecology, Environment, and Economics: Market Forces and Sustainability



### Faculty Contact Information

**Name:**

**Email:**

**Office Hour information:**

### Course Information

#### Course Description

The protection and sustainable management of the natural environment is an area of increasing concern across the globe. It is widely recognised that most environmental problems, whether small-scale or global, are the result of a complex interaction of natural processes with economic forces and decisions.

This course examines the continuing tension between market forces and environmental integrity and explains how economic theory views the relationship between economic activity and the natural world. Examples of local, regional, national, and international issues are presented and discussed. The course gives students the opportunity to develop a critical understanding of the different ways in which economic decisions, market forces, and government policies affect the environment while also providing a sustainable way for development and growth.

#### Course Goals

This course develops students' understanding of the economic impacts of environmental damage as well as the opportunities that come from managing the environment in a sustainable way. Furthermore, the course enables students to apply economic theory to environmental sustainability and develop an understanding of the conflict between market forces and environmental integrity while developing critical understanding of different ways in which economic decisions, market forces, and government policies affect the environment. In addition, the course shows students how consumer markets and business initiatives can lead the way into managing the environment in a sustainable way.

#### Student Learning Outcomes

At the end of this course, students will:

1. Apply economic theory to measure environmental sustainability
2. Distinguish market forces and environmental integrity
3. Interpret ways in which economic decisions, market forces, and government policies affect environment

4. Generate a critical understanding as to how consumer markets and business initiatives can result in sustainable environment

### Course Assignments, Grading, and Assessment

Assignment	Percentage	Grading Requirements
Attendance and Participation	20%	
Carbon Footprint Exercise	20%	Please see rubric on MyStudy
Mid-Term Exam	20%	Please see rubric on MyStudy
Group Project	20%	Please see rubric on MyStudy
Final Exam	20%	Please see rubric on MyStudy

### Brief Assessment Overview

#### Assessment 1: Carbon Footprint Exercise

**Due:**

##### **Assignment A: Carbon Footprint Calculation**

Students work out their annual carbon footprint using [www.carbonfootprint.com/calculator.aspx](http://www.carbonfootprint.com/calculator.aspx) to carry out calculations.

Each student then submits a 500-word report as to how they worked out the footprint.

##### **Assignment B: Reducing your footprint**

Based on the previous assignment, each student writes a 1,500-word report detailing how they could reduce their own carbon footprint.

#### Assessment 2: Mid-Term Test

**Due:**

To assess student awareness of the basic set of frameworks, theories on environmental economics, and sustainability.

#### Assessment 3: Group Project

**Due:**

Students work in small groups researching a particular aspect of environment sustainability, for example renewable energy, recycling, green marketing, carbon neutral production/operation, etc.

Groups then prepare a 30-minute presentation to the class with detailed findings and an additional 15 minutes of discussion and Q&A following the formal presentation grounded in 3 provocative statements that generate a debate and discussion for the session.

#### Assessment 4: Final Exam

**Due:**

Covers all the theoretical and applied subject matter covered in the course.

## Grading

Grade	Knowledge & Content	Methodology & Structure, Language & Style	Understanding, Reflection & Critique	Integrative thinking & demonstration of experiential learning
<b>A (93- 100%)</b> <b>A- (90-92%)</b>	Interesting topic handled with intelligence, originality, and depth; wealth of supporting material, smoothly integrated into the text; tone is evident and maintained throughout; no factual inaccuracies	Material is unified and well focused; organization is clear, logical and purposeful throughout the essay; well-chosen examples. Uses sophisticated sentences effectively; usually chooses words aptly; observes conventions of written English and manuscript format; makes few minor or technical errors	Well-chosen examples; persuasive reasoning used to develop and support thesis consistently: uses quotations and citations effectively; causal connections between ideas are evident	Gives full insight into the nature of an event, experience, or artifact; achieves complete integration of knowledge from diverse disciplines to interpret an issue. Shows clear understanding of cultural impact through appropriate examples
<b>B+ (87-89%)</b> <b>B (83-86%)</b> <b>B- (80-82%)</b>	Content is above average; worthwhile topic; satisfactory depth of development; supporting details for the thesis and topic sentences are specific, concrete, and plentiful; has only minor factual inaccuracies	Material is unified and well focused; pattern of organization is clear, logical, and well executed; makes an effort to organize paragraphs topically. Some mechanical difficulties or stylistic problems; may make occasional problematic word choices or awkward syntax errors; a few spelling or punctuation errors or cliché; usually presents quotations effectively	Pursues thesis consistently: develops a main argument with clear major points and appropriate textual evidence and supporting detail; makes an effort to organize paragraphs topically	Gives some insights into the nature of an event, experience, or artifact; achieves partial integration of knowledge from diverse disciplines to interpret an issue; some understanding of cultural impact through appropriate examples
<b>C+ (77-79%)</b> <b>C (73-76%)</b> <b>C- (70-72%)</b>	Worthwhile topic; supporting material for thesis and topic sentences is general and abstract rather than specific and concrete; most information is correct	Organization is clear, logical, and coherent; some ideas unsupported; fails to integrate quotations appropriately. More frequent wordiness; several unclear or awkward sentences; imprecise use of words or over-reliance on passive voice; one or two major grammatical errors	Only partially develops the argument; shallow analysis; some ideas and generalizations undeveloped or unsupported; makes limited use of textual evidence; fails to integrate quotations appropriately	Able to explain to a limited extent, the quality of a performance, event, or artifact; gives few insights into event, experience; discusses few qualities of an experience; a limited understanding of cultural impact with few examples
<b>D (60-69%)</b>	Trivial subject; very few supporting details for the thesis and topic sentences; has some correct & incorrect information	Not logically organized; digresses from one topic to another; no clear organizational pattern. Some major grammatical or	Frequently only narrates; digresses from one topic to another without developing ideas or terms; makes	Little integration of experience and narrative; limited insight of issues and insufficient understanding of cultural impact

		proofreading errors (subject-verb agreement; sentence fragments); language marred by clichés	insufficient or awkward use of textual evidence	
<b>F (0-59%)</b>	Consists of unsupported generalities and/or the repetition of commonplace ideas; lacks originality and insight; information is inaccurate or absent	Does not follow the instructions; rambling, disorganized and incoherent. Numerous grammatical errors	Little or no development; may list incorrect facts or misinformation; uses no quotations or fails to cite sources or plagiarizes	Little or no integration experience and narrative; lack of insight and fails to understand cultural impact

### Policies specific to this course

- **Co-curricular Activities and Field Trips:** Field trips for your FIE courses have been planned to help students achieve the learning objectives of the course and are required. They take place during class time unless otherwise noted. Details about required visits appear on the class by class schedule below. Please note that any make up for missed co-curricular activities are at the personal expense of the student.
- **Late submission of work:** Written work may be submitted later than the due date only with express permission from the faculty. Credit is not given for work received late, except in exceptional circumstances of personal illness or similar (which must be made known to FIE at the time). Documentation of exceptional circumstances from a third party, such as a doctor's note, may be required. Any extensions made beyond the last class meeting must be committed to writing and include information on the exceptional circumstances that require the extension, the nature of work yet to be submitted, and the date by which the work will be received. If said work is not received by the agreed extension date, barring further exceptional circumstances, the work will not be given credit.
- **Late arrivals to class or site visit:** Please arrive on time. Lateness, particularly on days with co-curricular visits, results in missed course material. Faculty may use their discretion to mark a student as 'Absent' if they feel the student has arrived too late or left too early to be considered 'Present' for that session.
- **Trigger Warnings:** Some topics covered in class may expose students to past traumas and evoke a negative reaction. Sensitive topics can vary, such as sexual violence, death, racism, or xenophobia. I want this to be an inclusive space where every student feels comfortable; therefore, I will provide content warnings before lectures for sensitive subject matters. Content warnings are meant to give students a forewarning so they can prepare for their emotional safety. It is important to note that anything in the environment could be a trigger for someone's trauma, such as smell, sound, or texture; it is impossible to account for all possible triggers, and ask for grace as I do my best as an educator to warn students of potentially distressing content during lectures, assignments and/or discussions.

### Attendance and Participation

- Regular attendance is essential in order to pass a course. A class constitutes lectures, student presentations, discussions, seminars, co-curricular activities, tests, and examinations. In addition, under UK Home Office regulations class attendance is mandatory.

- Class attendance and participation is formally recorded and incorporated into a student's final grade.
- In addition to physical presence in class, a student's participation in a class is evaluated on the mastery of assigned course readings as reflected in a consistent, valid contribution to class discussions, in-class exercises, and in asking questions that enrich the on-going discourse. Consistency and validity in participation is expected in every class. Limited participation will have a negative impact on a student's participation score.
- When unexpected events cause students to miss a class, it is the student's responsibility to initiate contact with the faculty member to notify them in advance, or as soon as is reasonably possible.
- Absence from class does not relieve a student of responsibility for assignments. Students bear the ultimate responsibility for all missed class material and assessment.
- If a student misses 25% or more of a course, then they may be awarded a failure for the course and/or not permitted to finish the course.
- [See the full attendance policy here](#)

### Required Readings

Hanley, N., Shogren, J. F., & White, B. (2019). *Introduction to Environmental Economics*. (3<sup>rd</sup> Ed.). Palgrave Macmillan.

### Additional Resources and Readings

Cullan, S.J., and Thomas, J.M. (2012). *Environmental Economics and Management: Theory, Policy, and Applications*. South-Western College. Maslin, M. (2008). *Global Warming: A Very Short Introduction*. (2<sup>nd</sup> Ed.). Oxford University Press

Olmstead S., & Keohane, N. (2007). *Markets and the Environment*. Island Press

Siebert, H. (2010). *Economics of the Environment: theory and practice*. (7<sup>th</sup> Ed.). Springer

Smith, S. (2011). *Environmental Economics: A Very Short Introduction*. Oxford University Press

Tietenberg, T., & Lewis, L. (2009). *Environmental Economics and Policy*. (6<sup>th</sup> Ed.). Pearson

Students are also advised to read *The Economist*, *Financial Times*, *The Independent*, *The Guardian* (environment section online), and other UK and International newspapers, journals, and periodicals relevant to the environment and sustainability.

### MyStudy@FIE

MyStudy@FIE is FIE's virtual learning environment based on the open-source platform Moodle. Students are required to access MyStudy@FIE for course information, readings, link to resources, assignment submissions and communication with faculty.

### FIE's Values in the Curriculum

A unique aspect to FIE's curriculum is our courses reflect an engagement with values of 1) knowledge and inclusivity, 2) ethics and human rights, 3) social and cultural engagement, and

4) sustainability. For information about each of these values and how each of FIE's courses aligns with them, please see [Our Values](#).

### Topics

- Introduction to the Economics of Environment. Overview of the main issues relating to economy, environment, and sustainability
- The Politics of Environmental issues. The Stern Report; sustainability and the Green movement
- Economic analysis and environmental issues; economic activity as a cause of environmental problems, externalities, social costs and benefits; the Pigou tax; the Coase argument; optimum pollution abatement
- Policy towards the environment: tools of intervention; the choice of instruments of intervention (command and control versus market solutions; prevention versus abatement of consequences; carbon taxes and carbon trading; eco-friendly innovation and economic growth)
- Cost-benefit analysis of environmental issues. Economic information and values in environmental policy decisions
- Global issues and climate change
- Environmental problems as a global issue; Kyoto, EU environmental policy

NB In addition to the formal sessions outlined above, students are strongly encouraged to attend as many as possible of the open lectures held at the LSE. Many of these are relevant to international trade, economics, and issues of contemporary interest. The ones which are taking place during this course are listed below. More details at <http://www2.lse.ac.uk/publicEvents/eventsHome.aspx>

### Possible co-curricular activities

- Borough Market:
- The Darwin Centre, Natural History Museum
- Sustainability walking tours
- Visits to case studies for sustainable development, for example the Olympic Park
- Film screening and debate, for example An Inconvenient Truth

### Academic Integrity

By enrolling at FIE, you have joined an academic community and you are expected and required to act honestly regarding the work you submit for assessment in your courses. Academic integrity is closely related to the concept of good academic practice.

Any attempts to Cheat; Fabricate; Plagiarise; Collaborate without Authorisation; Participate in Academically Dishonest Activities; and/or Facilitate Academic Dishonesty will be viewed as a breach of this regulation.

[Please see FIE's Academic Integrity Policy in full.](#)

Most students do not have any problems understanding the rules and expectations about acting honestly at university. If you have any questions you must talk to your faculty or a member of FIE's Academic Team.

### Writing and Language Support

FIE's Writing Support Tutors are available to assist students of all levels of expertise with all phases of the writing process. Available year-round and to all students. To book an appointment or for more information visit [www.fie.org.uk/wst](http://www.fie.org.uk/wst).

Please note that FIE allows the use of a foreign language/English dictionary in exam situations for students where English is not their primary language UNLESS the use of the dictionary would give the student a significant advantage (e.g. where the exam is aimed at getting the students to define terms that might be found in the dictionary).

### Accommodations for Students

Students who wish to use academic accommodations at FIE can register to do so via FIE's Administration Team, by providing the appropriate supporting documentation. Students who have approved FIE academic accommodations should discuss them directly with their faculty member(s) within or around the first few class sessions, or via email. Exams are facilitated by FIE faculty and students should give 2 weeks' notice to faculty members if use of approved exam accommodations is required. The Administration team can assist students and faculty with liaison and facilitation as needed.

### Additional Policies and Resources

#### Mental Health and Stress Management Support

FIE's qualified and accredited counsellor is Dr Deborah Hill, who offers appointments via video call and over the phone. The first three appointments are free of charge and ongoing sessions can be arranged directly with Dr Hill. To make an appointment with Dr Hill, simply email [studentlife@fie.org.uk](mailto:studentlife@fie.org.uk).

If you have a counsellor from back home that you are seeing, we strongly encourage you to maintain contact with them throughout your time studying abroad with FIE.

#### Diversity and Inclusivity

FIE regards its housing and classroom facilities as safe spaces to live, study, and work with students, faculty, and staff who are understanding, supportive, and trustworthy. Inappropriate, derogatory comments and/or actions, harassment, bullying, victimisation and discrimination are not tolerated. Any such behaviour will be investigated and dealt with appropriately. Students must be respectful of diverse opinions and of all class members regardless of personal attribute and use inclusive language in written and oral work.