DEREE COLLEGE SYLLABUS FOR:

EC 3334 ENVIRONMENTAL AND RESOURCE ECONOMICS – LEVEL 5   **UK CREDITS: 15**
                                                                                                                                          3/0/3
(Updated Summer 2021)

PREREQUISITES:	EC 1000 Principles of Microeconomics EC 1101 Principles of Macroeconomics EC 3270 Managerial Economics
CATALOG DESCRIPTION:	Market activity and the environment. Pollution as an externality. Environmental regulatory approaches: theory and practice. Benefit estimation procedures. Resource management.
RATIONALE:	This course introduces the student to the consequences of the interaction of market activity to the environment. It enables the student to understand how environmental problems are the outcome of market failure and, consequently, the role of governments in addressing such problems. It introduces the student to theory and practice of alternative environmental regulatory policies and natural resource management policies at the national and international levels. It complements the economic theory courses that students have taken by illustrating how abstract economic models are actually used at the national and international levels to address issues related to environmental problems.

LEARNING OUTCOMES: As a result of taking this course, the student should be able to:

1. Demonstrate detailed knowledge of the alternative ways of modeling the interaction of the economy and the environment.
2. Analyze how and why environmental problems can be modeled as cases of market failure/externalities.
3. Evaluate the advantages and disadvantages of various environmental policies.
4. Critically discuss the characteristics and properties of measures of benefits and benefit estimation procedures and their applicability to specific situations.
5. Define the basic conditions of the optimal use of renewable and exhaustible resources.
6. Evaluate cost-benefit analysis procedures intended to address issues related to preservation and conservation.

METHOD OF TEACHING AND LEARNING: In congruence with the learning and teaching strategy of the college, the following tools are used:

➢ Classes consist of lectures, case presentations, and class discussions of recent articles in economic journals assigned by the instructor.
➢ Office hours: students are encouraged to make full use of the office hours of their instructor, where they can ask questions and go over lecture material.
➢ Use of a blackboard site, where instructors post lecture notes, assignment instructions, timely announcements, as well as additional resources.

ASSESSMENT: Student performance is assessed as follows:

In-class, 1-hour, "diagnostic" test - **formative**	0	problems/essay questions combination
In-class midterm examination (1-hour) - **summative**	40	problems/essay questions combination
Final examination (2-hour, comprehensive) - **summative**	60	problems/essay questions combination

The formative test aims to prepare students for the final examination.
The ~~essay~~ the midterm examination tests Learning Outcomes 1- 3.
The final examination tests Learning Outcomes 3- 6 with emphasis on 4 - 6

READING LIST: Required textbook:
Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray. <u>Natural Resource and Environmental Economics.</u> Addison Wesley, Pearson HE, latest edition.

Further reading:
Field, Barry and Martha Field. Environmental Economics. McGraw Hill, latest edition.
Goodstein Eban, Economics and the Environment. Prentice Hall, latest edition.

**RECOMMENDED
MATERIAL:**   The Economist

WWW RESOURCES: netec.mcc.ac.uk
www.rff.org
www.rpgogress.org
www.rmi.org
www.worldbank.org
www.oecd.org
www.epa.gov
www.eea.eu.int

**SOFTWARE
REQUIREMENTS:**   Word and Excel

**COMMUNICATION
 REQUIREMENTS:**   Discussion and presentation of paper by using verbal skills and academic / professional English

INDICATIVE CONTENT: **1.   Economy and the Environment**
    1.1.   Introduction
    1.2.   Circular flow model
    1.3   Materials balance model
    1.4   Sustainable economy
2.   Environmental Problems as Externalities
    2.1.   Pollution as an externality
    2.2.   Pollution as a market failure
    2.3   Property rights
3.   Environmental Policies