COURSE OUTLINE

(1) GENERAL

SCHOOL	ECONOMICS and BUSINESS ADMINISTRATION		
ACADEMIC UNIT/PARTICIPATING UNITS*	Department of Economics		
PARTICIPATING INSTITUTIONS**	-		
POSTGRADUATE PROGRAMME: TITLE OF POSTGRADUATE PROGRAMME	Innovative and Sustainable Entrepreneurship		
LEVEL OF STUDIES	Post-graduate		
COURSE CODE	KAE-01	SEMESTER	1st
COURSE TITLE	Economics of Energy, Environment & Policy		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	WEEKLY TEACHING HOURS	CREDITS
	3	8

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General Background.
PREREQUISITE COURSES:	None.
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek with English terminology.
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No.
COURSE WEBSITE (URL)	To be announced

*Στην περίπτωση Διακρατικού, Διιδρυματικού ή Διατμηματικού ΠΜΣ συμπληρώνονται όλα τα συμμετέχοντα Τμήματα και χαρακτηρίζεται σε παρένθεση το επισπεύδον, π.χ. Φυσικής (επισπεύδον)

**Συμπληρώνεται μόνο στην περίπτωση Διακρατικού ή Διιδρυματικού ΠΜΣ

(2) LEARNING OUTCOMES

Learning outcomes
The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. *Consult Appendix A* • *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area* • *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong*

Learning and Appendix B

- *Guidelines for writing Learning Outcomes*

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

- Understand specific theoretical topics in the field of Energy Economics, Environment and Climate Change.
- Explain why specific phenomena occur in the field of Energy and Climate Change Economics and examine the reasons for their creation (e.g. capital-intensive investments)
- Combine theory with problems of an economic nature that fall within the course and successfully proceed to model them.
- Use literature review on relevant topics to generate information.
- Synthesize information derived from databases or literature review to produce new results or explain phenomena found in the real world.
- Recognise and evaluate the economic dimensions of different climate change and carbon management policy challenges.
- Evaluate, compare and argue the economic dimension (interpretation) of the solution in each context.
- Communicate and explain the critical economic issues related to climate change and carbon management to a wider audience and stakeholders in polluting industries.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

Search for, analysis and synthesis of data and information, with the use of the necessary technology, Adapting to new situations, Decision-making, Production of new research ideas, Respect for the natural environment, Criticism and self-criticism, Production of free, creative and inductive thinking.

(3) SYLLABUS

The course offers specialized knowledge on Energy & Environmental Economics along with the related policy aspects. In particular, the Energy market and the Economics of Renewable Resources are examined. At the same time, concepts such as Energy Efficiency (Energy conservation and efficiency, efficiency and productivity models) and Research and Development and Innovation in energy markets are studied. Additionally, the microeconomics of climate change is studied with Nordhaus' DICE models and other integrated models in focus. Finally, the macroeconomic effects of climate change and the cumulative effect on GDP, employment and consumption as well as the impact on businesses are presented. Moreover, the course examines aspects of the green and energy transition at both European and international level while monitoring progress towards climate neutrality through data collection and analysis. Concepts and definitions in the context of green and

energy transition and related policies are presented and their impact both at country and business level is examined. Policy options through environmental instruments and climate change mitigation instruments are studied. International experience is reviewed, and case studies are presented. Quantitative analysis is carried out with formal measurement indicators through applications. Interpretation of results and policy recommendations.

(4) TEACHING and LEARNING METHODS - EVALUATION

<table>
<tr><td>DELIVERY
Face-to-face, Distance learning, etc.</td><td>Distance Learning</td></tr>
<tr><td>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
Use of ICT in teaching, laboratory education, communication with students</td><td>• Use of PowerPoint during lectures
• Posting of educational material on the asynchronous e-learning platform in the course area
• Provision of bibliographic references for study on the asynchronous tele-education platform at the course site
• Posting of information of interest and announcements related to the course on the asynchronous e-learning platform in the classroom
• Communication via e-mail/eclass</td></tr>
<tr><td>TEACHING METHODS
The manner and methods of teaching are described in detail.
Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.

The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</td><td><table><tr><th>Activity</th><th>Semester workload</th></tr><tr><td>Lectures (3 hours/week x 13 weeks)</td><td>39 hours</td></tr><tr><td>Independent study</td><td>161 hours</td></tr><tr><td>Course total (25 hours of workload per ECTS credit)</td><td>200 hours (total student workload)</td></tr></table></td></tr>
<tr><td>STUDENT PERFORMANCE EVALUATION
Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where</td><td>Lectures and examinations within the course are conducted in person exclusively. Student assessment is based on a written final examination in Greek with English terminology, where necessary, which may include multiple choice questions, short answer questions, solving exercises, interpretation of results and/or a combination of the above.</td></tr>
</table>

they are accessible to students.	

(5) RECOMMENDED BIBLIOGRAPHY

- Suggested bibliography:

- *Principles of environmental economics and sustainability, Kritiki SA Publications, ISBN: 9789605864439, Book Code in Eudoxos: 122075417.*
- Kounetas, K. & **Chatzistamoulou, N.** (2023). Energy Economics, Climate Change & Sustainable Development. Kallipos, Open Academic Editions.
- Bhattacharyya, Subhes C. (2011) Energy Economics: Concepts, Issues, Markets and Governance.Springer.
- Evans, Joanne and Lester Hunt,(2009), International Handbook on the Economics of Energy.Edward Elgar.
- Tol, R. 2019. Climate Economics: Economic Analysis of Climate, Climate Change and Climate Policy. Edward Elgar Publishing; 2nd edition.

- Related academic journals:

Indicatively: Environmental and Resource Economics, Ecological Economics, Energy Economics, Journal of Environmental Management, Journal of Environmental Economics and Management, Energy Journal, Energy Policy.