COURSE OUTLINE

(1) General

School:	Social Sciences		
Academic Unit:	Geography		
Level of studies	Undergraduate		
Course Code:	GEO 201	**Semester:**	C
Course Title:	Environment and Ecology		
Independent Teaching Activities	**Weekly Teaching Hours**	**Credits**	
Lecture	3		
		Course total	5
Course Type:	Required		
Prerequisite Courses:	None		
Language of Instruction and Examinations	Greek		
Is the course offered to Erasmus students:	No		
Course Website (Url):	https://geography.aegean.gr/pps/index_en.php?content=0&lesson=201		

(2) Learning Outcomes

Learning Outcomes

At the end of the course, the student is expected to:

- perceive the life component on earth at temporal and spatial scale, as well as the relations between organisms and their environment, combining basic knowledge of environmental science and ecology from biological and societal viewpoints
- decipher physical phenomena encompassing the biotic dimension
- be able to use the correct scientific terminology, in particular terms and vocabulary used in official or every language including mass media
- will have achieved the required level of knowledge to attend relevant courses taught in higher semesters of the Curriculum of the Department of Geography, e.g. Environmental Geography, Biogeography, Ecogeography of the Mediterranean, Geography and Management of Natural Resources
- be better advised to contribute to Environmental Impact Studies.

General Competences

1. Adapting to new situations
2. Decision-making
3. Team work
4. Respect for the natural environment
5. Criticism and self-criticism
6. Production of free, creative and inductive thinking

(3) Syllabus

Theory

Ecology: science, principles, policy and politics. Historical aspects of Ecology as a science, and political tool.

Organization and characteristics of life in space (biological, ecological) and time (ecological, historical, geological-evolutionary). Interdependences of abiotic and biotic components: structure, function and dynamics of organisms, communities, ecosystems, biosphere. Flow of energy and materials through the ecosystems. Biogeochemical circles. Effects of ecological factors: abiotic (solar radiation, temperature, light, water, soil) and biotic (relationships between species and organisms).

Seminars

13 seminars on ecological concepts and analysis of classical papers that shaped ecological theory, thinking, and policy worldwide.Alternatively, analysis of a current ecological subject, first by the sudents, then discussed with the teacher in the classroom.

(4) Teaching and Learning Methods - Evaluation

Delivery:	Teaching of the course includes face-to-face lecturing in a lecture room, a homework-report to be delivered by the students, and a series of seminars to discuss and analyse the ecological concepts and classical papers in ecology.	
Use of Information and Communication Technology:	Lectures are carried out using powerpoint and other high tec methods. Teaching is supported by the geoserver platform of the Department of Geography. Communication with the students is facilitated by email.	
Teaching Methods:	**Activity**	**Semester workload**
Lecture	39	
Tutorials	13	
Project	16	
Non-supervised study	70	
Performance evaluation/Exams	2	
	Course total<	140
Student Performance Evaluation	Both theory and presentations in seminars are evaluated as follows: Theory: A written exam at the end of the course is evaluated (70% of the final mark) Seminar: The final exams vis-a-vis the ability to hold discussion on the matter is evaluated (20%). A homework report by each student is evauated (10%).	

(5) Attached Bibliography

1. Lecture notes and practical excercises handouts provided electronically by the teachers: \Geo-fs.aegean.grcoursesPPSEcology
2. Σειρά από ιστότοπους και άλλο υλικό που δίνεται στο: \Geo-fs.aegean.grcoursesPPSEcology2012-13_Readme_Literature for students.doc.
3. Richard T. Wright, Dorothy F. Boorse (2012). Περιβαλλοντική Επιστήμη – Προς ένα βιώσιμο μέλλον. Πετανίδου Θ., Ριζοπούλου Σ. επιστημονική και μεταφραστική επιμέλεια. Επιστημονικές Εκδόσεις Παρισιάνου, Αθήνα, σελ. 723 + xxii.
4. Michael Begon, Robert W. Howarth, Colin R. Townsend (2015). *Οικολογία – Πληθυσμοί, Βιοκοινότητες και Εφαρμογές* (Σ. Σγαρδέλης, Π. Δημόπουλος, Σ. Πυρίντσος, Επιμ.). Utopia Publishing, Αθήνα.
5. Manuel*C. Molles Jr.* (2009). Οικολογία: *Έννοιες, εφαρμογές* (Θ. Γεωργιάδης, Επιμ.). Εκδόσεις Μεταίχμιο, Αθήνα
6. Vokou D (2009). Geniki Oikologia: mia eisagogi. University Studio Press, Thessaloniki.
7. Theis T, Tomkin J (Eds) (2013). Sustainability: A Comprehensive Foundation. Rice University,

Houston, Texas. Available online: http://cnx.org/content/col11325/1.40/.