Course Code	Course Title	ECTS Credits	
OGEN-315	Biodiversity	6	
Department	Semester	Prerequisites	
Management & MIS	Fall / Spring	None	
Type of Course	Field	Language of Instruction	
Major Elective	Energy, Oil and Gas	English	
	Management	_	
<b>Level of Course</b>	Year of Study	Lecturer(s)	
Undergraduate	3 <sup>d</sup>	Dr Marios Valiantis	
Mode of Delivery	Work Placement	Co-requisites	
face-to-face	N/A	None	

### **Objectives of the Course:**

To provide the student with a comprehensive understanding of the main aspects about species, biodiversity and taxonomy, and about the fundamental concepts of conservation, genetics, evolution and adaptation.

# **Learning Outcomes:**

On completion of this module, students are expected to be able to:

- 1. Explain the classification system for organisms and appreciate biodiversity within plant and animal taxonomy
- 2. Understand the role and diversity of micro-organisms
- 3. Use dichotomous keys for identification of organisms
- 4. Research, compile and write a literature-based report.

#### **Course Content:**

Biodiversity of living organisms; Covention on Biological Diversity; features of the major groups of animals and plants and their classification; diversity and functional importance of microorganisms; an introduction to genetics, evolution and natural selection; the use of and construction of identification keys; an introduction to the conservation of biodiversity.

## **Teaching Methods:**

Lectures, In-class exercises, In-class discussions and homework

#### **Assessment Methods:**

Assignments, mid-term exam, final exam

### **Required Textbooks:**

Authors	Title	Publisher	Year	ISBN
Kevin J Gaston	Biodiversity	Blackwell	1998	
and John I Spicer		Sciences, Oxford		

## **Recommended Textbooks / Reading:**

- 1. Beeby A., and Brennan A-M 2008 First Ecology. 3<sup>rd</sup> Ed. Oxford University Press.
- 2. Cain, M.L., Yoon, C.K. and Singh-Cundy, A. 2009. Discover Biology. 4<sup>th</sup> Ed. W.W. Norton & Company
- 3. Dobson, M. & Frid, C. (2008) Ecology of Aquatic systems. Oxford University press
- 4. Mackenzie, A. Ball. A. and Virdee, S. (2001) BIOS Instant notes in ecology. (2nd edition) Taylor & Francis.

### **Websites:**

- 1. National Biodiversity Network www.nbn.org.uk/
- 2. Royal Botanic Gardens, Kew <a href="http://www.rbgkew.org.uk/">http://www.rbgkew.org.uk/</a>
- 3. The Natural History Museum, London <a href="http://www.nhm.ac.uk/">http://www.nhm.ac.uk/</a>
- 4. University of Oxford Botanic Garden <a href="www.botanic-garden.ox.ac.uk">www.botanic-garden.ox.ac.uk</a>
- 5. World Conservation Union <a href="http://www.iucn.org/">http://www.iucn.org/</a>