COURSE OUTLINE "INTRODUCTION TO BIOLOGY"

1. GENERAL

SCHOOL	HEALTH SCIENCES		
DEPARTMENT	MOLECULAR BIOLOGY AND GENETICS		
STUDY LEVEL	ISCED LEVEL 6		
COURSE CODE	**MBG103**	**SEMESTER**	1st
COURSE TITLE	INTRODUCTION TO BIOLOGY		

TEACHING ACTIVITIES *In case credits are awarded to individual components of the course eg. Lectures, laboratory practicals, etc. If credit units are awarded for the whole course, indicate the weekly teaching hours and total credits*	**HOURS/WEEK**	**ECTS CREDITS**
	3	4

COURSE TYPE *General, Background, Scientific field course, Expertise Course, Skills Development etc*	SCIENTIFIC FIELD
PREREQUISITE COURSES:	NO
LANGUAGE OF TEACHING AND EXAMINATIONS:	GREEK
THE COURSE IS OFFERED TO ERASMUS STUDENTS	NO
COURSE WEBSITE (URL)	https://eclass.duth.gr/courses/ALEX01122/

2. LEARNING OUTCOMES

Learning outcomes

Describe the learning outcomes of the course, the specific knowledge, skills and competencies that students will acquire after successfully completing the course. Refer to Appendix A.

• Description of learning outcomes for the course according to the level of study - refer to the European Higher Education Area Qualifications Framework

• Descriptive Indicators of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Annex B Curriculum Vitae Summary Guide

A. Learning outcomes:

- Describe the principles of biology
- Understand the complexity of structure and function of organisms from the unicellular to the multicellular ones, as well as the diversity of animals and plants
- Identify the main organismal taxa based on their main characteristics and their phylogenetic placement

B. Synthesis, interpretation and analysis:

- Bring biological knowledge from previous levels to university standards
- Develop the critical thinking via synthetically combining the principles of life and the mechanisms supporting them throughout the organismal diversity
- Be inspired through the understanding of the history of molecular genetics with respect to human traits and diseases

General Skills

Which of the general competencies that the student will have acquired on the completion of the studies (see also the Diploma Supplement and below) are relevant to this course?

Research, analysis and synthesize of data and information, using the necessary technologies
Adaptation to new situations
Decision making
Autonomous work
Team work
Work in an international environment
Work in an interdisciplinary environment
Production of new research ideas
Project design and management
Respect for diversity and multiculturalism
Respect for the natural environment
Development of social, professional and moral responsibility and gender sensitivity
Promotion of free, creative and inductive thinking

Searching, data and information analysis and composition with the use of necessary technologies
Autonomous work
Production of new research ideas
Awareness for the natural environment

Promoting free, creative and inductive thinking

3. COURSE CONTENT

- Origin and properties of life
- Biomolecules and their characteristics
- Structure and function of prokaryotic cells
- Structure and function of eukaryotic cells
- Non cellular life structures (viruses-viroids-prions)
- Protists - Fungi
- Principles of diversity and classification
- Plant diversity
- Animal diversity I – the animal body plan
- Animal diversity II - protostomes
- Animal diversity III - deyterostomes
- The genetic Code
- The human genome

4. TEACHING and LEARNING METHODS - EVALUATION

TYPE OF TRAINING *Face-to-face, Distance learning, etc..*	Face to face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, and in communication with the students*	Use of ICT in technology for teaching Use of ICT in communication with the students
MODES OF DELIVERY *Describe the teaching methods in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, practicum, 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*	
STUDENT PERFORMANCE EVALUATION *Describe of the methods of evaluation language, methods of evaluation, types of exams, 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* *Are evaluation criteria known to the students?*	**Assessment language**: Greek **Assessment methods** Written Examination with Multiple Choice Questions and short answer questions (100%)

Activity	*Workload/semester*
Lectures	30
Interactive teaching	10
Study and analysis of bibliography	80
Course Total	**120**

5. SUGGESTED READING

- Βιολογία. Αιμιλία Ζήφα, Ζήσης Μαμούρης, Κατερίνα Μούτου. Εκδόσεις Παν/μίου Θεσσαλίας. Εκδοση 2/2011 (κωδικός ΕΥΔΟΞΟΥ 68390699)

- Ζωολογία. Miller Stephen Broken Hill Publishers Ltd ISBN: 978-9925-563-37-1 (κωδικός Ευδόξου 77107008, ISBN 9789925563371).

- Βιολογία. Starr Cecie, Evers Christine, Starr Lisa. Μετάφραση- επιμέλεια ελληνικής έκδοσης Μαρία Χατζάκη κ.ά 1η έκδοση στα ελληνικά 2014. Εκδόσεις Utopia 2014 (κωδικός ΕΥΔΟΞΟΥ 32998265 και ο ISBN: 978-618-80647-1-3)