

COURSE OUTLINE “ENGLISH FOR BIOSCIENCES”

1. GENERAL

SCHOOL	HEALTH SCIENCES		
DEPARTMENT	MOLECULAR BIOLOGY AND GENETICS		
STUDY LEVEL	ISCED LEVEL 6		
COURSE CODE	MBG522	SEMESTER	5 th
COURSE TITLE	ENGLISH FOR BIOSCIENCES		
TEACHING ACTIVITIES <i>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</i>	HOURS/WEEK	ECTS CREDITS	
	2	3	
COURSE TYPE <i>General, Background, Scientific field course, Expertise Course, Skills Development etc</i>	BACKGROUND		
PREREQUISITE COURSES:	B2 ENGLISH LEVEL		
LANGUAGE OF TEACHING AND EXAMINATIONS:	ENGLISH		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	NO		
COURSE WEBSITE (URL)	https://eclass.duth.gr/courses/418339/		

2. LEARNING OUTCOMES

<p>Learning outcomes</p> <p><i>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.</i></p> <ul style="list-style-type: none"> • 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 			
<p>After completing the course, students will have:</p> <ul style="list-style-type: none"> - promoted their ability to comprehend scientific texts - been familiarised with a great number of terms related to medicine, molecular biology, and genetics and their etymology - learned how to construct compound scientific terms - improved academic skills such as notetaking, effective delivery of oral presentations, writing a research paper - developed oral communication skills and will be able to contribute effectively to discussions - enhanced critical thinking 			
<p>General Competencies</p> <p><i>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?</i></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <ul style="list-style-type: none"> 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 </td> <td style="width: 50%; border: none;"> <ul style="list-style-type: none"> 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 </td> </tr> </table>		<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
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<p>Autonomous work</p> <p>Teamwork</p> <p>Promotion of free, creative and inductive thinking</p> <p>Research, analysis and synthesis of data and information, using the necessary technologies</p> <p>Adaptation to new situations</p> <p>Decision making</p> <p>Development of social, professional and moral responsibility and gender sensitivity</p>			

3. COURSE CONTENT

- The Building Blocks of Medical and Genetic Terminology
 - Word Parts: Roots/Combining Forms, Prefixes, Suffixes
 - Spelling - Pronunciation
 - Plural Formation of Terms Derived from Greek and Latin
- Body Organization (Chemicals – Cells – Tissues – Organs – Organ Systems)
- Major Body Systems
- Theories of Evolution - Early Humans - Theories on the Origin of Life on Earth
- Genetics
 - Principles of Heredity
 - Genetic Material
 - The Human Genome Project
- Alterations in the Genetic Material
 - Mutations
 - Point Mutations
 - Chromosomal Alterations
- DNA Repair Mechanisms
- Genetic Testing – Genetic Counselling
- Gene Editing - CRISPR
- Types of Diseases - Genetic Disorders
- Proto-oncogenes to Oncogenes to Cancer
- Viruses – How are Pathogens Spread and Controlled – How Pandemics Spread
- Pharmacy, Pharmacology and Drugs - Types of Drugs
- Basic Hospital Vocabulary – Laboratory Equipment
- Bioethics
 - The Principles of Bioethics
 - Major Bioethical Issues
- Academic Skills
 - Notetaking
 - Making a Presentation
 - Writing a Research Paper

4. TEACHING and LEARNING METHODS - EVALUATION

TYPE OF TRAINING <i>Face-to-face, Distance learning, etc..</i>	Face to face												
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, and in communication with the students</i>	Use of ICT in teaching Use of ICT in communication with the students												
MODES OF DELIVERY <i>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</i>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #e0e0e0;"> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Study and analysis of science-related</td> <td>26</td> </tr> <tr> <td>Speaking, listening & writing activities</td> <td>26</td> </tr> <tr> <td>Project</td> <td>18</td> </tr> <tr> <td>Non-directed study</td> <td>20</td> </tr> <tr> <td>Course Total</td> <td>90</td> </tr> </tbody> </table>	Activity	Workload/semester	Study and analysis of science-related	26	Speaking, listening & writing activities	26	Project	18	Non-directed study	20	Course Total	90
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STUDENT PERFORMANCE EVALUATION <i>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</i>	<p>A written exam is administered at the end of the semester.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr style="background-color: #e0e0e0;"> <th>Types of Exercises</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Multiple choice questionnaire</td> <td>20%</td> </tr> </tbody> </table>	Types of Exercises	Percentage	Multiple choice questionnaire	20%								
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<i>Are evaluation criteria known to the students?</i>	Short-answer questions	20%
	Writing exercises	60%

5. SUGGESTED READING

- Θεώνη Καβουρά, Ελένη Ναλμπάντη, *Focus on the Language of Medicine in Health Sciences*, Ιωάννης Κωνσταντάρας, 2022
- Γεώργιος Μιχαηλίδης, Νέλλη Βέζου-Μαγκούτη, *Αγγλοελληνικό Ελληνοαγγλικό Λεξικό των Ιατρικών Όρων*, Ιωάννης Κωνσταντάρας, 2005