COURSE OUTLINE

1. GENERAL

SCHOOL	HEALTH SCIENCES		
DEPARTMENT	MOLECULAR BIOLOGY AND GENETICS		
LEVEL OF STUDIES	LEVEL 6		
COURSE CODE	**MBG407**	**SEMESTER**	**8th Spring**
COURSE TITLE	CURRENT TRENDS AND METHODOLOGY IN TEACHING BIOSCIENCES		

TEACHING ACTIVITIES *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.*	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
	2	6
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.		

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	SKILL DEVELOPMENT
PREREQUISITES:	NO
TEACHING & EXAMINATION LANGUAGE	GREEK
COURSE OFFERED TO ERASMUS STUDENTS:	NO
COURSE URL:	https://eclass.duth.gr/courses/ALEX01187/

2. LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

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

become familiar with the structural elements of teaching

recognize and use/apply contemporary teaching methods and techniques based on new theoretical trends

develop critical thinking about specific aspects of the educational process and procedure, including self-assessment and reflection on the part of the teacher.

General Skills

Taking into account the general skills that graduates should have acquired (as listed in the Diploma Supplement and set out below), which of these does the course aim to develop?

Search, analysis and synthesis of data and information,
ICT Use
Adaptation to new situations
Decision making
Autonomous work
Teamwork
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project design and management
Equity and Inclusion
Respect for the natural environment
Sustainability
Demonstration of social, professional and moral responsibility and sensitivity to gender issues
Critical thinking
Promoting free, creative and inductive reasoning

Autonomous work Equity and Inclusion Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning Project design and management

3. COURSE CONTENT

1 – 4: Topics covered: lesson planning group-collaborative teaching (prerequisites, characteristics, and implementation stages) design and use of educational platforms, exercises, lesson plans, and educational scenarios management of teaching time ways of organizing the learning process in the classroom use of alternative forms of assessment instructor reflection 5-10: Techniques presented: Enriched Lecture Questions and Answers Case Study Working Groups Brainstorming Debate Role-playing Simulation Demonstration/Experiment Peer teaching Educational visit Flipped Classroom The project method Problem Based Learning Massive Open Online Courses (MOOCs) Augmented Reality 10-13: Small indicative assignments are completed in class

4. LEARNING AND TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc*	Face to face. Lectures, simulations, and case studies.
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) *Use of ICT in Teaching, in Laboratory Education, in Communication with students*	Use of ICT in teaching and communicating with students, use of synchronous and asynchronous education platforms (teams/e-class), Digital Repositories "Fotodentro", Interactive School Books e-books.edu.gr, VR/AR, YouTube.
TEACHING ORGANIZATION *The ways and methods of teaching are described in detail.* *Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical*	

Activity	*Workload/ semester*
Lectures	20
Classroom Work	6
Study at home	84
Writing Assignment	70
Total Course	**180**

Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc. *The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.*	
STUDENT EVALUATION *Description of the evaluation process* *Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others* *Please indicate all relevant information about the course assessment and how students are informed*	Assessment language: Greek Assessment method: Final exam with short-answer questions based on critical thinking (100%). Alternatively, students may be assessed on a presentation (50%) and/or assignment (50%) that they may complete in small groups, in which case all members of each group receive the same grade. The assessment criteria are accessible to students as they are posted on eclass. The final assessment criteria are:

FINAL ASSESSMENT CRITERIA	max
UNDERSTANDING OF THE EXAMINED MATERIAL	25
RELEVANCE OF ANSWERS TO THE TOPIC	20
ACCURACY AND COMPLETENESS OF ANSWERS	25
DEPTH OF ANALYSIS AND CRITICAL THINKING	25
STRUCTURE OF ANSWERS (SPELLING/SYNTAX/COHERENCE/FORM/LINGUISTIC COMPETENCE AND CLARITY OF EXPRESSION)	5
TOTAL	**100**

The criteria for evaluating written assignments are as follows:

CRITERIA FOR EVALUATING WRITTEN ASSIGNMENTS	max
INTRODUCTION TO THE ASSIGNMENT	5
DEVELOPMENT OF THE MAIN TOPIC IN SECTIONS - SUB-SECTIONS (DEGREE OF RESPONSE TO THE REQUIREMENTS OF THE ASSIGNMENT)	50
CONCLUSIONS/ SUMMARY/ RECAPITULATION/ CONCLUSION OF THE ASSIGNMENT	5
CRITICAL THINKING, USE AND PRESENTATION OF SOURCES/ARGUMENTS	15
AVOIDANCE OF PLAGIARISM/READY-MADE TEXTS THROUGH AI	10
USE OF BIBLIOGRAPHY AND METHOD OF CITING BIBLIOGRAPHICAL REFERENCES AND REFERENCES WITHIN THE TEXT AND AT THE END OF THE TEXT	10
"TECHNICAL" ISSUES (COVER/ CONTENTS/ SPELLING/ SYNTAX/ TEXT FORMAT)	5
TOTAL	**100**

The evaluation criteria for public presentations are as follows:

CRITERIA FOR EVALUATING PUBLIC PRESENTATIONS	max
CONTENT & VALIDITY OF DATA AND CONTENT	30
ORGANIZATION & STRUCTURE OF PRESENTATION	20

	CRITICAL APPROACH/ ORIGINALITY AND PERSONAL CONTRIBUTION	15
	PRESENTATION STYLE (FLOW AND CLARITY OF SPEECH, CORRECT USE OF TERMINOLOGY/ COMMUNICATION WITH THE AUDIENCE)	15
	VISUAL MATERIAL (SLIDES THAT ARE EASY TO READ, COMPREHENSIVE, APPROPRIATE/ CORRECT USE OF IMAGES, DIAGRAMS OR GRAPHS)	10
	TIME MANAGEMENT	5
	RESPONDING TO QUESTIONS	5
	TOTAL	**100**

5. ΣSUGGESTED BIBLIOGRAPHY

Noye, D., και Piveteau, J. (1999). *Πρακτικός οδηγός του εκπαιδευτή*. Μεταίχμιο.

Αθανασίου, Κ. (2009). *Εισαγωγή στις βιολογικές επιστήμες και η διδακτική τους*. Γρηγόρης

Ανδρέου, Λ-Β, Μαραγκός, Π., & Ψαρροπούλου, Αι. (Επιμ.) (2021). *Διδακτική της Βιολογίας.* Εκδόσεις Δίσιγμα.

Ζόγκζα, Β. 2009). *Θέματα διδακτικής της βιολογίας*. Μεταίχμιο.

Καλοβρέκτης, Κοντού, Ψαχάρης & Παρασκευοπούλου-Κόλλια (2019). Οι ΤΠΕ στις Επιστήμες της Αγωγής: Σχεδιασμός Διδακτικών Σεναρίων. Επιστημονικές Εκδόσεις Τζιόλα.

Κεδράκα, Κ., & Γκοτζαρίδης, Χ. (2016). *Διδακτικός και Επαγγελματικός Σχεδιασμός στις Βιοεπιστήμες.* ISBN: 9786185135041. Αθήνα: Ακαδημαϊκές Εκδόσεις Ι. Μπάσδρα & Σία. Κωδικός **ΕΥΔΟΞΟΣ=** 59396334

Τζοβλά, Ει., & Κεδράκα, Κ. (2021). *Διδάσκοντας βιολογικές έννοιες στην Πρωτοβάθμια Εκπαίδευση: Οι εκπαιδευτικοί προτείνουν*. Δημοκρίτειο Πανεπιστήμιο Θράκης & Συγγραφείς: Εργαστήριο Διδακτικής και Επαγγελματικής Ανάπτυξης των Βιοεπιστημόνων.

Ματσαγγούρας, Η. (2006). Η *σχολική τάξη: Θεωρία και πράξη της διδασκαλίας: Χώρος, ομάδα, πειθαρχία, μέθοδος*. Γρηγόρης

Ματσαγγούρας, Η. & Χατζηγεωργίου, Γ. (2009). *Εισαγωγή στις Επιστήμες της Παιδαγωγικής. Εναλλακτικές Προσεγγίσεις, Διδακτικές Προεκτάσεις*.

Παντελιάδου, Σ., & Φιλιππάτου, Δ. (Επιμ), (2013). *Διαφοροποιημένη διδασκαλία. Θεωρητικές προσεγγίσεις και εκπαιδευτικές εφαρμογές*. Πεδίο.

Ταρατόρη - Τσαλκατίδου, Ελ. (2015). *Η μέθοδος Project στη θεωρία και στην πράξη*. Αφοί Κυριακίδη.

COURSE OUTLINE APPENDIX

Alternative ways of examining a course in emergency situations

Department:	Molecular Biology and Genetics
Course:	CURRENT TRENDS AND METHODOLOGY IN TEACHING BIOSCIENCES
Course Code	MBG407
Instructor:	Prof. Kedraka Katerina
Method of communication with instructor	Email via personal address kkedraka@mbg.duth.gr , and via eclass communication tools.
Examiners/Supervisors:	
Semester:	8th
Level of study:	Undergraduate Course
Examination methods:	Written assignment (exemption from examinations)
Examination instructions:	The assignment topic is assigned at least 1-2 months before the exams and is posted in the course announcements on eclass. Assignments must be submitted to eclass, in the Assignments field, by the exam date as indicated in the exam period schedule. A supporting document with instructions for completing the assignment is posted on eclass. The maximum grade is 10. Assignments account for 100% of the final grade for the course.