COURSE OUTLINE

(1) GENERAL

SCHOOL	SOCIAL SCIENCES
ACADEMIC UNIT	CULTURAL TECHNOLOGY AND COMMUNICATION
LEVEL OF STUDIES	UNDERGRADUATE
COURSE CODE	PLR110

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SEMESTER	2
COURSE TITLE	OBJECT ORIENTED PROGRAMMING I

INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS
Lectures	2	
Laboratory	2	
	4	6

COURSE TYPE	Core Course
PREREQUISITE COURSES:	INTRODUCTION TO PROGRAMMING
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	https://eclass.aegean.gr/courses/131371/

(2) LEARNING OUTCOMES

Learning outcomes
Upon completion of the courses, students will be able to:

- Understand the basic principles of object-oriented programming and how to apply them.
- Grasp the importance of object-oriented application design for problem-solving.
- Comprehend the syntax and functioning of entities used in the Python programming language.
- Create programs using the Python programming language by applying the principles of object-oriented programming.
- Easily and quickly understand other object-oriented programming languages such as Java, C++ and C#.

General Competences

- Search, analysis, and synthesis of data and information, utilizing necessary technologies.
- Adaptation to new situations.
- Autonomous work.
- Teamwork.
- Promotion of free, creative, and inductive thinking.

(3) SYLLABUS

The course focuses on introducing object-oriented programming. The transition from procedural to object-oriented programming is the challenge and goal of the course. The language chosen is Python, which combines these two programming philosophies and makes the transition from one programming philosophy to the other smoother and less painful. Using the tools of the language, all the concepts of object-oriented programming are gradually analyzed. Special attention is given to the object-oriented design of programs, not just the use of object-oriented tools. The knowledge gained

from attending the course facilitates the learning of other object-oriented programming languages such as Java, C++ and C#.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of ICT in Teaching, in Communication with Students. Utilization of LMS E-Class & Moodle.	
TEACHING METHODS	*Activity*	*Semester workload*
	Lectured	13 *2 H=26 H
	Lecture study	13*5 H = 65 H
	Laboratory Exercises	13*2 = 26 H
	Preparation of laboratory exercises and delivery tasks during the semester.	33 H
	Total	150 H
STUDENT PERFORMANCE EVALUATION	The final exam includes problem-solving and short-answer questions. It contributes 70% to the final grade of the course. Mid-semester progress assessment contributes 30% to the final grade of the course. Additionally, several optional assignments are given during the semester, which are based on both the theoretical and laboratory parts of the course and are counted positively towards the student's final grade. Evaluation criteria are communicated during the first class and are clearly stated in the material provided on the course's e-class platform.	

(5) ATTACHED BIBLIOGRAPHY

- CHATZIGIANNAKIS M. NIKOS, "Python in depth", KLEIDARITHMOS, 2023, Greek
- MATTHEWS ERIC, "PYTHON CRASH COURSE", DISIGMA 2020,(Greek translation)