



Detailed Course Syllabus

Academic Year		2023/2024	Semester	Winter
Study Program	Undergraduate study	Specialization/ Major in	For student Incoming Mobility	Year of Study 1.,2.,3

I. BASIC COURSE INFORMATION

Name	Intro to Programming		
Abbreviation	IZBEPSOC1	Code	251987
Status	Elective	ECTS	6
Prerequisites	No		
Total Course Workload			
Teaching Mode	Total Hours	Teaching Mode	Total Hours
Lectures	45	Exercises	45
Class Time and Place	CUC - according to the published schedule		

II. TEACHING STAFF

Course Holder

Name and Surname	Karlo Filipan		
Academic Degree	PhD	Professional Title	Assistant Professor
Contact E-mail	karlo.filipan@unicath.hr	Telephone	
Office Hours	According to the published schedule		

III. DETAILED COURSE INFORMATION

Teaching Language	English
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Course Description	Course Goals: Acquiring basic programming skills in Python programming language. Using Python for creation of simpler programs and as a scripting tool.
	Course Contents: Introduction to computers and programming. Python Integrated Development Environment. Basic data types. Global and local variables. Expressions and declarations. Arithmetic and logical operations. Flowchart and conditional code execution. Functions and block structure of the program. Input/output expressions and formats. Using program loops. Handling data arrays: string, list, set, dictionary, tuple. Reading and writing files. Python modules and their use. Version control using Git. Project work.
Expected Educational Outcomes	<ol style="list-style-type: none"> 1. Demonstrate use of Python Integrated Development Environment. 2. Explain the basic principles of program design in Python.

3. Differentiate between data structures in Python.
4. Explain the manner of execution of existing programming code.
5. Outline project work for a simple programming task.
6. Create simpler programs during project work.

Textbooks and Materials

Required	Severance, C. R. (2016). <i>Python for Everybody</i> . (PDF available online) Lutz, M. (2014). <i>Python Pocket Reference: Python In Your Pocket, Fifth Edition</i> . O'Reilly Media, Inc. Official documentation on www.python.org/doc
Supplementary	Barry, P. (2016). <i>Head first Python: A brain-friendly guide</i> . O'Reilly Media, Inc. Lutz, M. (2013). <i>Learning Python, Fifth Edition</i> . O'Reilly Media, Inc.

Examination and Grading

To Be Passed	YES	Exclusively Continuous Assessment	NO	Included in Average Grade	YES
Prerequisites to Obtain Signature and Take Final Exam		<ol style="list-style-type: none"> 1. Regular class attendance – attending at least 70% of lectures 2. Acquiring minimum 35/70 points during classes (midterm exams and project work) 			
Examination Manner		<ol style="list-style-type: none"> 1. Continuous evaluation during classes – midterm exams and project work 2. Final exam – passing grade minimum 15/30 points 			

Obtaining points:

1. Class activities – 70%:
 - a. Midterm exam 1 – 20%
 - b. Midterm exam 2 – 20%
 - c. Project work – 30%
2. Final exam – 30%

Grading Manner

Numerical scale for evaluating student work:

- Excellent (5) – 90 do 100% of points
- Very good (4) – 75 do 89,99% of points
- Good (3) – 60 do 74,99% of points
- Sufficient (2) – 50 do 59,99% of points
- Insufficient (1) – 0 do 49,99% of points

Detailed Overview of Grading within ECTS

Activity	ECTS points	Percentage of the grade (%)
Attendance	2.25	0
Midterm exam 1	0.75	20
Midterm exam 2	0.75	20
Project work	1.125	30
TOTAL DURING CLASSES	4.875	70

Final exam	1.125	30
TOTAL POINTS	6	100

Midterm Exam Dates	7 th and 14 th week of lectures
Final Exam Dates	According to the published schedule

IV. WEEKLY CLASS SCHEDULE

Lectures

Week	Topic
1.	Computer, program, Integrated Development Environment
2.	Basic data types, variables and expressions
3.	Arithmetic and logical operations
4.	Flowchart and conditional execution
5.	Functions and block structure of the program
6.	Input/output expressions and formats
7.	Repetition; 1 st midterm exam
8.	Loops and iterations; <i>Project work – initial considerations</i>
9.	Data arrays: string, list, set; <i>Project work – planning</i>
10.	Data arrays: dictionary, tuple; <i>Project work – implementation</i>
11.	Working with files; <i>Project work – implementation</i>
12.	Python modules; <i>Project work – implementation</i>
13.	Python modules; <i>Project work – testing</i>
14.	Repetition; 2 nd midterm exam
15.	Git and code versioning; <i>Project work – final presentations</i>

Seminars

Week	Topic
1.	Computer, program, Integrated Development Environment
2.	Basic data types, variables and expressions
3.	Arithmetic and logical operations
4.	Flowchart and conditional execution
5.	Functions and block structure of the program
6.	Input/output expressions and formats
7.	Repetition; 1 st midterm exam
8.	Loops and iterations; <i>Project work – initial considerations</i>
9.	Data arrays: string, list, set; <i>Project work – planning</i>
10.	Data arrays: dictionary, tuple; <i>Project work – implementation</i>
11.	Working with files; <i>Project work – implementation</i>
12.	Python modules; <i>Project work – implementation</i>

13.	Python modules; <i>Project work – testing</i>
14.	Repetition; 2 nd midterm exam
15.	Git and code versioning; <i>Project work – final presentations</i>