SUBJECT (MODULE) DESCRIPTION

Subject (module) name	Code
Programming „Python“	

Lecturer	Unit
Coordinating: Assist. dr. Konstantinas Korovkinas	Kaunas faculty Institute of Social Sciences and Applied Informatics Muitines str. 8, LT-44280 Kaunas

Study stage	Subject (module) level	Subject (module) type
First		Individual Studies

Form of implementation	Implementation period	Implementation language
Auditorium	Spring semester	English

Requirements for the student	
Prerequisites: Structured and object-oriented programming	**Adjacent requirements:**

Subject (module) volume in credits	Full student workload	Contact Hours	Independent working hours
5	130	52	78

Subject (module) goal: study program competences to be developed

Subject goal – to introduce the possibilities of programming in Python and to provide practical skills.

General competence:

1. Continuous learning (BK2)

Subject competencies:

1. Knowledge and skills of conceptual basics (DK4)
2. Technological, methodological knowledge and skills, professional competence (DK6)

Subject (module) learning outcomes	Study methods	Assessment methods
Will be able to describe Python programming language syntax and principles.	Demonstration, discussion, problem-based teaching, independent work	Practical tasks, exam
Will be able to understand a source code written in Python, to modify and execute it.		
Will be able to write applications in Python.		
Will be able to work with text files.		
Will be able to work with databases.		
Will be able to develop web services.		

Topics	Contact Hour							Independent working hours	
	Lectures	Consultations	Seminars	Exercise	Labworks	Practice	**Full Contact Hours**	**Independent work**	**Tasks**
1. Python interpreter, programming language syntax (procedural programming, object-oriented programming) and style	1			3			**6**	**2**	Tasks: 1. Functions, object-oriented programming 2. Modules, standard library 3. Work with text files 4. Work with databases 5. Web services
2. Modules and standard library	1			3			**6**	**6**	
3. Work with text files	3			6			**6**	**6**	
4. Work with databases	6			10			**12**	**18**	
5. Web services creation	3			6			**12**	**18**	
6. Popular Python Libraries	2			4			**8**	**10**	
7. Preparing for the exam								**18**	
8. Exam		4					**2**		
Total	**16**	**4**		**32**			**52**	**78**	

Estimation strategy	Weight %.	When	Estimation criterion
Practical tasks	50	During the semester	Three tasks. Each is rated on a 10-point scale. Criteria for evaluation: correct functioning and the fulfillment of the specified conditions (70%), error handling in source code (20%), explanation of the source code (10%). The exercise rating is calculated using the formula: PI = (U1+U2+U3)/3
Exam	50	During the semester	Three tasks to implement. Maximum rating 10 points.

Author	Year of publication	Title	Periodical No. or volume of publication	Place of publication and publisher or internet address
Mandatory literature				
James P. Meyers	2023	Python Programming Bible		https://www.amazon.com/Python-Programming-Bible-Including-Practical/dp/B0CL2VCGYM
David Beazley	2021	Python Distilled		Pearson
Additional literature				
Python documentation		The Python documentation		https://docs.python.org/3/
Sqlalchemy documentation		Sqlalchemy documentation		https://www.sqlalchemy.org/
Flask documentation		Flask documentation		https://flask.palletsprojects.com/en/3.0.x/