TOROS ÜNİVERSİTESİ

Faculty Of Engıneerıng
Computer And Software Engıneerıng

Course Information

PYTHON PROGRAMMING LANGUAGE					
Code	**Semester**	**Theoretical**	**Practice**	**National Credit**	**ECTS Credit**
		Hour / Week			
CSE224	Spring	3	2	4	

Prerequisites and co-requisites	None
Language of instruction	English
Type	Elective
Level of Course	Bachelor's
Lecturer	Asst. Prof. Mehmet Ali AKTAŞ
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise (internship)	None
Objectives of the Course	Basic understanding of installing Python environments and be able to identify the different data types and data structures. Input/output handling and have a firm understanding of how to handle errors and exceptions in Python. Basics of runtime services and language services and databases. How operating system services work and be able to identify how network programming is accomplished in Python. Identifying the various methods used for file and directory handling, and be able to identify how threads and concurrency work in Python.
Contents of the Course	Features of Python Programming Language. Data Types and Operators in Python. Conditional Statements. Running Python Scripts. Object Orientation in Python. Class Inheritance and Method Overriding. Import Statements, Loading and Compiling Module. Input and Output Handling in Python. Files and File Objects. Exception Handling.

Learning Outcomes of Course

#	Learning Outcomes
1	To be able to has a basic knowledge of programming using Python language and the analysis of some fundamental problems and related algorithms solvers.
2	To be able to understand the key features of Python language.
3	To be able to write a Python program/module using the basic syntax elements.
4	To be able to understand the best practices for programming in Python.
5	To be able to gain an in-depth understanding on conditionals, constructs, and loops as well as a firm understanding of modules, packages, and the importing of modules.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction to Python	Lecturing
2	Development, Setup and Deployment	Lecturing
3	Data Types, Data Structures	Lecturing
4	Control Flow, Functions, Classes and Object-Oriented Programming	Lecturing
5	Module, Packages and Importing Modules	Lecturing
6	IO Handling	Lecturing

7	Errors and Exceptions	Lecturing
8	Midterm Exam	Exam
9	Testing, Debugging, Profiling, and Tuning	Lecturing
10	Standard Library, Built-In Functions, String and Text Handling	Lecturing
11	Python Runtime Services and Language Services	Lecturing
12	Database Access	Lecturing
13	File and Directory Handling	Lecturing
14	Threads and Concurrency	Lecturing
15	OS Services	Lecturing
16	Final Exam	Exam

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	To be able to has a basic knowledge of programming using Python language and the analysis of some fundamental problems and related algorithms solvers.	2,3,4	1,2
2	To be able to understand the key features of Python language.	2,3,4	1,2
3	To be able to write a Python program/module using the basic syntax elements.	2,3,4	1,2
4	To be able to understand the best practices for programming in Python.	2,3,4	1,2
5	To be able to gain an in-depth understanding on conditionals, constructs, and loops as well as a firm understanding of modules, packages, and the importing of modules.	2,3,4	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	5	70
2	Course Duration Except Class (Preliminary Study, Enhancement)	0	0	0
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	0	0	0
9	Quiz	0	0	0
10	Homework	4	5	20
11	Midterm Project	1	10	10

12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	0	0	0
16	Final Exam	0	0	0
				100