

Identification	Subject	CMS 211: Fundamentals of Computer Programming (3 credits)	
	Department	Computer Science	
	Program	Undergraduate	
	Term	Fall, 2018	
	Instructor	Mahammad Sharifov (Ph.D.)	
	E-mail:	msharifov@khazar.org	
	URL:	www.mahammad.info	
	Classroom/hours	41 Mehseti str. (Neftchilar campus)	
Prerequisites	CMS 101: Introduction to Computer Science		
Language	Azerbaijani		
Compulsory/Elective	Compulsory		
Required textbooks and course materials	<div>1. Learn Python 3 The Hard Way. Third Edition by Zed A. Shaw, 2017.</div> <div>2. Fundamentals of Python Programming by Richard L. Halterman, 2018</div>		
Course outline	This is a computer science course for Education faculty students that introduces the Fundamentals of computer technology, architecture, programming languages and their application in daily life. Introduction to programming using Python language, sequential programming, data types, arrays and iterators, blocks and process and Object-Oriented programming will be also discussed.		
Course objectives	<div>Course objectives are:</div> <div><div>- Learn to program in Python language</div><div>- Learn working with numbers, letters and string</div><div>- Learn working with arrays, iterators and modules</div><div>- Learn to program using conditions and loops</div><div>- Learn to program using classes and objects</div><div>- Learn to program using simple databases</div><div>- Learn to use different libraries</div></div>		
Learning outcomes	<div>By the end of the course students should be able:</div> <div><div>- To understand basic computer architecture</div><div>- To develop programs using Python language</div><div>- To solve various problems using programming</div></div>		
Teaching methods	Lecture		x
	Experiential exercise		x
	Assisted work		x
	Lab work		x
	Others		
Evaluation	Methods	Date/deadlines	Percentage (%)
	Midterm Exam		30
	Activity		5
	Assignment and quizzes (4)		15
	Project		10
	Final Exam		40
	Total		100
Policy	<div>▪ Preparation for class</div> <div>The structure of this course makes your individual study and</div>		

	<p>preparation outside the class extremely important. The lecture material will focus on the major points introduced in the text. Reading the assigned chapters and having some familiarity with them before class will greatly assist your understanding of the lecture. After the lecture, you should study your notes and work relevant problems and cases from the end of the chapter and sample exam questions.</p> <p>Throughout the semester we will also have a large number of review sessions. These review sessions will take place during the regularly scheduled class periods.</p> <ul style="list-style-type: none"> ▪ Withdrawal (pass/fail) <p>This course strictly follows grading policy of Khazar University. Thus, a student is normally expected to achieve a mark of at least 60% to pass. In case of failure, he/she will be required to repeat the course the following term or year.</p> ▪ Cheating/plagiarism <p>Plagiarism and Cheating of any kind on an examination, quiz, or project will lead to assignment cancellation. In this case, the student will automatically get zero (0), without any considerations.</p> ▪ Professional behavior guidelines <p>The students shall behave in the way to create favorable academic and professional environment during the class hours. Unauthorized discussions and unethical behavior are strictly prohibited.</p> ▪ Ethics <p>Students should not arrive in late to class. All electronic devices must be silenced and stowed during class.</p>
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Tentative Schedule			
Weeks	Date/Day (tentative)	Topics	Textbook/Assignments
1		Introduction to Programming Languages/Classifications	Presentations
2		Algorithms. Visualization of Algorithms.	Presentations
3		Python Basics. Data types, Basic Operations. Conditional statements.	Presentations
4		Variables and Data Types: Lists, Tuples, Strings, Dictionaries.	Presentations
5		Functions, Loops.	Presentations
6		Arrays in Python.	Presentations
7		Python Methods. String Methods, List Methods, Dictionary Methods, Tuple Methods.	Presentations
8		Midterm Exam	
9		Classes and Objects.	Presentations
10		Python Iterators and Modules.	Presentations
11		Built-in Functions.	Presentations
12		File Handling in Python.	Presentations
13		Creating Website and Templates in Python.	Presentations
14		Python MySQL. Python MongoDB	Presentations
15		Libraries of Python	Presentations
16		Final Exam	

This syllabus is a guide for the course and any modifications to it will be announced in advance.