

Basic data of the subject			
Academic unit:	Faculty of Engineering and Informatics Applied Informatics		
Title of the subject:	Object Oriented Programming		
Level:	Bachelor		
Course Status:	Obligatory		
Year of studies:	I		
Number of hours per week:	3		
Value of Credits - ECTS:	5		
Time / location:			
Course lecturer:	Prof. Ass. Dr. Dhuratë Hyseni		
Contact details:	Dhurate.hyseni@ushaf.net		
Course Description:	<i>This course will introduce and enable students to apply object-oriented programming techniques to software. This course also enables students to successfully learn and apply object programming concepts and techniques.</i>		
Objectives of the course:	<i>The purpose of the course is to equip students with modern knowledge in "thinking and programming object-oriented" and in complex software systems. In addition, students in this course will learn to program objects with C# programming language. Requirements to fulfill the purpose of this course are: Programming skills and active student during lectures and exercises.</i>		
Expected learning outcomes:	<i>After successful completion of this course, the student will be able to:</i> <ul style="list-style-type: none"> • <i>Understand the key concepts of object-oriented programming.</i> • <i>Be able to write class code and use objects.</i> • <i>To implement inheritance and polymorphism in code.</i> • <i>Be able to handle mistakes.</i> • <i>Identify the complexity of programming problem solving methodologies.</i> 		
Contribution to the student load (which must correspond with learning outcomes)			
Activity	Hour	Day/Week	In total
Lectures with numerical exercises	3	15	45
Internship			
Contacts with teacher / consultations			
Field exercises			
Midterm, seminars and projects.	3	2	6
Homework			
Self-learning time student (at the library or at home)	3	15	45

Final preparation for the exam	7	2	14
Time spent on evaluation (tests, quiz and final exam)			
Projects and presentations.	3	5	15
Total			125
Teaching methodology:			
	<i>Lectures and exercises combined with case studies and classroom discussions</i>		
Assessment methods:			
	<i>Test 1, Test 2, Attendance and Activity. Final exam: 100%</i>		
The ratio of theory and practice:			
	<i>70% theory with exercises and 30% laboratory work.</i>		
Literature			
Basic Literature:			
	<i>1. Clark, D., & Sanders, J., Beginning C# object-oriented programming, 2011</i>		
Additional Literature:			
	<i>1. Jack Purdum, Beginning Object-Oriented Programming With C#, 2013</i> <i>2. Robert Harle, "Object Oriented Programming", IA NST CS and CST Lent 2009/10</i> <i>3. Materiali i propozuar për lexim dhe ushtrime nga Profesori i lëndës.</i>		
Designed learning plan			
Week:	Lectures and exercises to be held		
Week one:	<i>Introduction to Object Oriented Programming</i>		
Week two:	<i>Basic classes, static and partial</i>		
Week three:	<i>Constructors and destructors</i>		
Week four:	<i>Objects in programming</i>		
Week five:	<i>Hiding and visibility of classes</i>		
Week six:	<i>Reference types and value types</i>		
Week seven:	<i>Data access, attributes, properties, and methods</i>		
Week eight:	<i>First evaluation</i>		
Week nine:	<i>Inheritance and polymorphism of classes</i>		
Week ten:	<i>abstract classes and interfaces</i>		
Week eleven:	<i>Packages and collection of classes</i>		
Week twelve:	<i>Exceptions and error handling</i>		
Week thirteen:	<i>Basics of Graphical User Interface.</i>		
Week fourteen:	<i>Testing objects oriented programs</i>		
Week fifteen:	<i>Second evaluation</i>		
Academic policies and rules of conduct			
<i>Regular attendance of lectures and exercises is necessary, as well as active participation with discussion and solution of tasks. Not impeding the progress required for learning using mobile phones turned off or in silent mode.</i>			