

Course Name : Object Oriented Programming							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 114	A	Spring	3.00	0.00	1.00	3.50	5.00
Lecturer		Edlir Spaho, MSc					
Assistant							
Course language		Albanian					
Course level		Bachelor					
Description							
Objectives							
Core Concepts							
Course Outline							
Week	Topic						
1	General knowledge about Object Oriented Programming. Review and completion of knowledge about functions.						
2	Different types of functions used in C++ programming language. Inline and macro functions.						
3	Overloaded functions. Function models. Different algorithms for ordering and finding data declared as Models.						
4	Different ways of evaluating algorithms. Enumerations. Practical examples of the use of enumerations.						
5	Structures. Definition of structures and declaration of the respective objects. Initialization directly with the values of the variables included in the components of structures during the declaration of the respective objects. Access to components of objects.						
6	Definition and use of functions involved in the components of structures. Definition of functions outside the structures.						
7	Simultaneous use of different structures. Nested structures.						
8	Semi Final Exam						
9	Objects as parameters of functions. Use of arrays within structures. Declaring and Utilizing Fields of Objects.						
10	Classes. Difference between structures and classes. Definition of classes and declaration of respective objects.						
11	Declaring the private and public components within classes and the possibilities of their use. Initialize values of variables in private components and get the values set in these components.						
12	Constructors. Class inheritance.						
13	References and their use for taking values from the functions.						
14	Pointers and ways of using them. Receiving and forwarding data to functions using the pointer.						
15	Testing and Documentation of Object Oriented Programs						
16	Final Exam						

Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• Programimi i Orientuar në Objekte, me programe në C++, Agni Dika • How to Program C++, H.M. Deitel, P. J. Deitel		
References	• Agni Dika Programimi i Orientuar në Objekte, me programe në C++, UEJL, Fakulteti i Shkencave Bashkëkohore, Tetovë, ISBN 9989-866-25-2 • http://www.agnidika.net/programimiobjekte.pdf • H.M. Deitel, P. J. Deitel How to Program C++ Prentice Hall, Upper Saddle River, New Jersey, ISBN 0-13-111881-1		
Course Outcome			
1	Students get knowledge and abilities Classes and Objects, Pointers, Attributes and Methods.		
2	Get knowledge and abilities how classes are inherited.		
3	Get knowledge and abilities generic methods and polymorphism		
4	Get knowledge and abilities about testing and documentation of Object Oriented Programs		
Course Evaluation			
In-term Studies		Quantity	Percentage
Midterms		1	30
Quizzes		0	0
Projects		1	30
Term Projects		0	0
Laboratory		0	0
Class Participation		0	0
Total in-term evaluation percent			60
Final exam percent			40
Total			100
ECTS Workload (Based on Student Workload)			
Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	3	42
Duties	1	10	10
Midterms	1	2	2
Final Exam	1	2	2
Other	1	5	5
Total Work Load			125
Total Work Load / 25 (hours)			5.00
ECTS			5.00