Akdeniz University

F. Course Description

Course Name	Computer Programming			
Course Language	Turkish			
Course Level	Associate Degree (x)	First Cycle (x)	Second Cycle ( )	Third Cycle ( )

Mode of Delivery		
Formal (x)	Distance Learning (x)	Others (x)

Course Type		**Course Unit Code**	**Course Code**
Required ( )	Elective (x)	ENF	111

Theory (Hours)	**Application (Hours)**	**Total**	**Semester**	**National Credits**	**ECTS**
2	0	2	Fall / Spring /Summer	2	4

Course Objectives	The aim of this course is learning properties of general programming languages, algorithm consept, control and loop consepts, data structures, branching, multi-way decision statement, arrays, subprogram concept, visual programming consept.
Course Content	Programming, Algorithm, Software
Pre-requisites	
Recommended Elective Courses	
Course Learning Outcomes	Students should be able to: 1) Write algorithms and prepare flowcharts 2) Know basic programming terms and concepts 3) Write a program with a programming language
Course Coordinator	Instructor Uğur ERCAN
Course Lecturer(s)	Department Academic Members

Teaching Methods		
(x) Oral Presentation	( ) Case Study	(x) Computer assisted
( ) Discussion	( ) Drama	(x) Laboratory
(x) Problem Solving	( ) Invention	(x) Demonstration - Moviations
( ) Experiment	(x) Project	( ) .....

Course Notes / Textbooks	1. Algoritma Geliştirme ve Programlamaya Giriş, Dr. Fahri Vatansever, Seçkin Yayıncılık 2. Algoritma Geliştirme ve Veri Yapıları, Rifat Çölkesen, Papatya Yayıncılık 3. Algorithms in C, C++, Java, Robert Sedgewick

Evaluation System		
( ) Direct Conversion System		Relative Assessment

	Requirements	**Number**	**Percentage of Grade**
Measurement and Evaluation System	Attendance	15	10 %
	Quizzes		
	Midterm Exam(s)	1	15 %
	Homework(s) / Seminar(s)	3	10 %
	Term Assignment(s) / Project	1	15 %
	Application (Laboratory, Atelier , Field Work, Problem Based Learning- PBL Reports)		
	Others (.....)		
	Final Exam	1	50 %
	Total		**100 %**

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Distribution of Topics By Weeks		
Weeks	**Topics**	**Preparatory Work**
1	1. Introduction to Programming 1.1. Basic computer concepts 1.2. Program, programmer, programing language	
2	2. Introduction to Programming 2.1. Properties of general programming languages 2.2. Classification of programming languages 2.3. Software development steps 2.4. Errors, warnings	
3	3. Basic Programming Concepts 3.1. Algorithm concept 3.2. Algorithm writing forms 3.3. Flow charts	
4	4. Basic Programming Concepts 4.1. Control and loop Concepts	
5	5. Algorithm Practices 5.1. Sequential algorithm 5.2. Algorithm with loops 5.3. Algorithm with conditional statements	
6	6. Introduction a Programming Language 6.1. Description of a programming language 6.2. Description of development environment	Setup Editor Program of Programming Language
7	6.3. Data structures 6.4. Basic input-output commands	
8	*Midterm*	
9	6.5. Conditional structures	
10	6.6. Branching 6.7. Loops	
11	6.8. Writing an example with loop, condition and branching 6.9. Multi-way decision statement	
12	6.10. Arrays	
13	6.11. Subprogram and function concept	
14	7. Visual programming concept	
15	7.1. Visual programming applications	

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	Course Learning Outcomes*										
Program Outcomes	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	Total
PO 01- A basic, theoretical and practical knowledge about basic information technologies.	2	5									7
PO 02- Information about design and development of hardware and software solutions.											
PO 03- Constructing and implementing identified problems and models at using use of information technology and applying of basic solution suggestions.	4	4	3								11
PO 04- Developing software specifications defined which components.			5								5
PO 05- Following current developments of information and communication technologies by awareness of lifelong learning necessity.											
PO 06- Communicating by published and visual materials developed information and communication technologies.											
PO 07- Having algorithmic though and using planning approach on their applications.	5	3	3								11
PO 08- Carrying professional and ethical responsibility having professional ethics awareness about IT applications. Taking necessary cautions about information security											

* 1: Low 2: Lowest 3: Average 4: High 5: Highest

ECTS of the Course Based on Learning, Teaching and Evaluation Activities (Average Hours)				
Activities	**Number**	**Preparatory Work**	**Duration**	**Total Workload**
Theory	14	0	2	28
Using Library and Internet	14	0	2,482142857	34,75
Homework(s) / Seminar(s)	2,464286	0	2,821428571	6,952806122
Project	0,357143	0	0,892857143	0,318877551
Presentation	0,107143	0	0,482142857	0,051658163
Applied Course	6,392857	0	4,196428571	26,82716837
Quizzes	1,017857	0	0,375	0,381696429
Midterm Exam-1	1	0	4,178571429	4,178571429
Midterm Exam-2	0	0	0,892857143	0
Midterm Exam-3	0	0	0,607142857	0
Final Exam	1	0	4,428571429	4,428571429
Other Learning Activities	14	0	1,660714286	23,25
			Total Workload (Hours)	129,1393495
			Rounding [Total Workload (hours) / Weekly Workload (30)] = ECTS	4,304644983