TOROS ÜNİVERSİTESİ

Faculty Of Engıneerıng
Electrıcal And Electronıcs Engıneerıng (Englısh)

Course Information

ADVANCED PROGRAMMING					
Code	**Semester**	**Theoretical**	**Practice**	**National Credit**	**ECTS Credit**
		Hour / Week			
CSE106	Spring	2	2	3	4

Prerequisites and co-requisites	
Language of instruction	English
Type	Required
Level of Course	Bachelor's
Lecturer	
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	Advanced programming topics and object oriented programming.
Contents of the Course	Essential concepts of object oriented programming, structures, classes, properties, methods, objects; constructors, destructors, encapsulation, inheritance, polymorphism, operator overloading; templates; exceptions and exception handling; dynamic memory allocation and management; memory pointers; threads, basics of threaded programming; use of integrated development environments.

Learning Outcomes of Course

#	Learning Outcomes
1	Become familiar with the main concepts and processes of object oriented programming;
2	Analyse the concept of classes and their instantiations;
3	Analyse the concept of inheritance, polymorphism, and encapsulation;
4	Analyse the proper handling of exceptional situations in modern programming;
5	Analyse the main concepts of threaded programming;
6	Develop skills in using integrated development environments;
7	Be able to solve computing problems using object-oriented code.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction to SQL The Structure of SQL Queries	Textbook
2	Data Manipulation Language of SQL Queries and implementations Lab 1 due.	Textbook
3	Data Control Language of SQL Variables, Constants Lab 2 due.	Textbook
4	Data Definition Language of SQL Database applications Lab 3 due.	Textbook
5	Introduction to Access Database Working with an Access Database Lab 4 due.	Textbook
6	Using Bound Control to database monitoring SQL Statements, LINQ and filtering Data Lab 5 due.	Textbook
7	Working with System.Collections and Name Spaces Database programming with ADO.NET Lab 6 due.	Textbook

8	MIDTERM	
9	Using Data GridView to Display Database Records Formatting Data GridView Cells Lab 7 due.	Textbook
10	Inheriting Forms and creating base classes Using Encapsulation Lab 8 due.	Textbook
11	Data Centric Focus, Adding a second Grid Navigation Control Lab 9 due.	Textbook
12	Creating VBA Functions Creating and calling a new data object collections Lab 10 due.	Textbook
13	Writing a Disc Drive Error Handler Setting the Trap to The Try-Catch Code Block Lab 11 due.	Textbook
14	Comparing Error Handlers with Defensive Programming Techniques General Review	Textbook
15		
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Rebecca M. Riordan Microsoft SQLServer Programming MsPress:ISBN 975-509-272-2		

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	Become familiar with the main concepts and processes of object oriented programming;	1	1,2
2	Analyse the concept of classes and their instantiations;	1	1,2
3	Analyse the concept of inheritance, polymorphism, and encapsulation;	1	1,2
4	Analyse the proper handling of exceptional situations in modern programming;	1	1,2
5	Analyse the main concepts of threaded programming;	1	1,2
6	Develop skills in using integrated development environments;	1	1,2
7	Be able to solve computing problems using object-oriented code.	1	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	4	56
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	1	1	1
9	Quiz	0	0	0
10	Homework	10	3	30

11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	10	10
16	Final Exam	1	10	10
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