

Bilkent University
Department of Computer Technology and Information Systems
2018 - 2019 FALL Semester

Course Code	CTIS 479
Course Name	C# Programming in the .NET Framework
Course Credit	3 (3 hours Lecture + Lab)
Instructor	Neşe Şahin Özçelik office: C222 e-mail: nozcelik@bilkent.edu.tr
Description	This course introduces students to the .NET framework and provides the necessary skills and knowledge to design and develop applications in the .NET framework by using C# programming language. In this course, students will have hands-on experience on object oriented programming concepts with .NET framework features such as creating windows and web applications (ASP.NET), managing data with ADO.NET and Language-Integrated Query (LINQ), using Model View Controller (MVC) design pattern will be covered.
Text Book	Visual C# How to Program, Paul J. Deitel, Harvey Deitel, Prentice Hall, ISBN-13: 9780134601540
Other Materials	Lecture notes and examples codes provided by Neşe Şahin Özçelik
Important Notes	Students who want to take this course must have good knowledge of object-oriented principles and have hands-on experience with an object-oriented programming language (e.g., C++, java) Students who do not attend at least 50% of the lectures will receive an "FZ" letter grade. If a student's overall grade (calculated by saps from assignments, homeworks, projects, quizzes and midterm) is less than 25.0 (25/70) on the last day of classes, (s)he will receive an "FZ" letter grade and will not be able to attend to final or retake exam.

Assessment

Assignments / Homeworks	20%
Performance	5%
Projects	15%
Quizzes	10%
Midterm	20%
Final	30%

Grading Criteria

A	[90 – 100]
A-	[85 – 90]
B+	[80 – 85]
B	[75 – 80]
B-	[70 – 75]
C+	[65 – 70]
C	[60 – 65]
C-	[55 – 60]
D+	[50 – 55]
D	[45 – 50]
F	[0 – 45]

IMPORTANT NOTE The Information contained in the course syllabus is subject to change. Students will be informed of any changes either in the class and/or by e-mail and/or publishing at the course moodle page. It is each student's responsibility to regularly check the course's moodle page and his/her Bilkent e-mail account to learn about any course related changes and announcements.

DETAILED COURSE OUTLINE

Week	Lecture Topics
1	General Information about the course. Introducing .NET and .NET concept. Describe MSIL and Common Language Runtime (CLR), Introduction to C#
2	Overview of C#: C# Primitive types, methods, control statements, primitive type arrays, multi-dimensional arrays, unchecked/checked keyword, operators, default function arguments,
3	Classes, constructors, constructor initializer, static constructor, destructor/finalizer, data members, member methods, static members and methods, constant members, usage of out, usage of ref
4	Visibility modifiers, accessors and mutators, object methods, , overloading, variable number of parameters (params), command line argument, namespace/using
5	Structures, nested structures, structure methods and constructor, enumerator QUIZ-1
6	Inheritance, interface, polymorphism, object class, virtual methods and overriding, abstract class, polymorphism,
7	String, String Buffer, custom formatting , operator overloading, collection framework (Hashtable, SortedList), IComparable, IComparator
8	Indexer, delegates, events, operator overloading
9	Exceptions, file operation, serialization, database connection, ADO.NET, data binding, data Source, LINQ queries MIDTERM
10	Web applications, web forms, web controls, master page, validation controls, ASP.NET page life cycle, state management (view state, application state, cookie, session)
11	Web services, ASP.NET applications, RSS, XML Web services
12	Web applications, web services, Ajax, JQuery
13	MVC design pattern QUIZ-2
14	Entity framework