

## CMPE342-Client/Server Programming

**Department:**

Computer Engineering

**Program Name:**

Computer Engineering

**Program Code: 25**
**Course Number:**

CMPE342

**Credits:**

4 Cr

**Year/Semester:**

2023-2024 Spring

 Required Course      Elective Course

**Prerequisite(s):**

CMPE231 – Data Structures

**Catalog Description:**

This course is an introduction to the tools, technologies, and languages used for the design and implementation of Web applications. This course covers the following topics: Hypertext Markup Language (HTML), a client side Web programming language (e.g. JavaScript), multithreaded programming, socket programming, server side Web programming (e.g. ASP.Net with C#), Web services, and Graphical User Interface (GUI).

**Aims and Objectives**

A student who successfully fulfills the course requirements will be learnt to design and develop dynamic Web pages by using current Web technologies and Web programming languages for client-side and server-side. Furthermore, s/he will be learnt how to use Web services, multithreaded programming and socket programming.

**Course Web Page:**
<https://staff.emu.edu.tr/yiltanbitirim/en/teaching/cmpe342>
**Text Books:**

- “Internet & World Wide Web – How to Program”, P. Deitel, H. Deitel, and A. Deitel, 5<sup>th</sup> Ed., Prentice Hall, 2012.
- “Starting out with Visual C#”, T. Gaddis, 5<sup>th</sup> Ed., Pearson, 2020.
- “Visual Basic 2012 How to Program”, P. Deitel, H. Deitel, and A. Deitel, 6<sup>th</sup> Ed., Pearson, 2014.

**Supplementary Books:**

- “Programming with Microsoft Visual Basic 2017”, D. Zak, 8<sup>th</sup> Ed., Cengage, 2018.
- “Visual C# How to Program”, P. Deitel and H. Deitel, 6<sup>th</sup> Ed., Pearson, 2017.

**Topics Covered, Lab Schedule and important dates:**
**(4 hours of lectures per week) (2 hours of laboratory per week)**

Wk.	Date	Topic	Lab.	Note
1	12/02/24-18/03/24	Introduction to the Internet (L1) – Video Lectures		
2	19/02/24-25/02/24	Marking Up Web Content (HTML5) (L2.1)		
3	26/02/24-03/03/24	Marking Up Web Content (HTML5) (L2.1-L2.2)		
4	04/03/24-10/03/24	Cascading Style Sheets (CSS3) (L3.1)	Lab. #1 – HTML	
5	11/03/24-17/03/24	Cascading Style Sheets (CSS3) (L3.1-L3.2)		
6	18/03/24-24/03/24	Client Side Scripting (JavaScript) (L4.1-L4.3)	Lab. #2 – CSS	
7-8	25/03/24-07/04/24	<b>MT Exams</b>		
9	08/04/24-14/04/24	No class		* Ramadan Bairam (09/04-12/04)
10	15/04/24-21/04/24	Client Side Scripting (JavaScript) (L4.3-L4.5)		
11	22/04/24-28/04/24	Server Side Scripting (ASP.NET with C#) (L5.0-L5.4)	Lab. #3-Client Side Scripting	* National Sovereignty & Children’s Day (23/04)
12	29/04/24-05/05/24	Server Side Scripting (ASP.NET with C#) (L5.4-L5.8)		* MT (02/05) * Workers’ and Spring Day (01/05)
13	06/05/24-12/05/24	Server Side Scripting (ASP.NET with C#) (L5.8-L5.9)		
14	13/05/24-19/05/24	Web Services (L6)	Lab. #4- Server Side Scripting	* Atatürk Commemoration, Youth and Sports Day (19/05)
15	20/05/24-26/05/24	Multithreaded Programming (C#) (L7) + Socket Programming (C#) (L8)		
16	27/05/24-02/06/24	Database Application with ASP.Net and C# (L9)	Lab. #5-Web Services, M. Prog., and S. Prog.	
16-17	03/06/24-16/06/24	<b>Final Exams</b>		

**Course Learning Outcomes:**

On successful completion of the course, the student is expected to be able to:

1. Work with a modern programming environment for Web programming
2. Use basic and advanced HTML commands (1)
3. Use CSS in Web page design (1)
4. Use Web services (1)
5. Do multithreaded programming (1)
6. Do socket programming (1)
7. Use a client side scripting language to develop dynamic Web pages (1)
8. Work with server side scripting to develop Web applications (1)
9. Use validation controls in Web applications (1)
10. Use session in Web applications (1)

	Method	No.	Percentage
<b>Assessment</b>	Laboratory Work	5	20%
	MT Exam	1	40%
	Final Exam	1	40%
	Attendance	Every lecture	-

**Grading Policy**

85-100 → A	80-84 → A-	
75-79 → B+	70-74 → B	66-69 → B-
63-65 → C+	60-62 → C	57-59 → C-
54-56 → D+	50-53 → D	45-49 → D-
0-44 → F		

**Attendance:****Lectures:**

- Attendance will be taken in every lecture.

**Exams:**

- If you miss midterm exam, you must submit a written petition stating a valid reason to your instructor within 3 working days after that examination in order to be able to enter makeup exam.
- If you miss final exam, you must submit a written petition stating a valid reason to your instructor within 3 working days after that examination in order to be able to enter makeup exam.
- If you miss both midterm and final exams and have a petition for each, you will be able to enter makeup exam for the final exam only.
- If you miss both midterm and final exams and do not enter makeup exam, you will get “**NG**” grade.

**Laboratory Works:**

- **No makeup for laboratory works.**

**Plagiarism**

Plagiarism (which also includes any kind of cheating in exams, assignments and lab works) is a disciplinary offence and will be dealt with accordingly. Furthermore, the penalty of plagiarism is to get zero grade for the corresponding exam, assignment or lab work.

**Contribution of Course to Criterion 5**

Credit Hours for; Mathematics & Basic Science : 0, Engineering Sciences and Design : 4, General Education : 0

**Instructor Information**

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**Assistant Information**

**Name:** Emre Rifat Yıldız (PhD. Res. Asst.), **E-mail:** emre.yildiz@emu.edu.tr (**Coordinator**)

**Name:** Ali Moayedı Azarpour (PhD. Res. Asst.)

**Name:** Ebtihal I. Enfes (MSc. Res. Asst.)

**Name:** Norbert Aloh Leke (MSc. Res. Asst.)

**Meeting times and places**

Mondays, 10:30-12:20, Room: CMPE238 (CMPE342 (Gr. 02))  
 Mondays, 12:30-14:20, Room: CMPE238 (CMPE342 (Gr. 01))  
 Mondays, 14:30-16:20, Room: CMPE238 (BLGM342 (Gr. 01)) (**LAB.**)  
 Tuesdays, 12:30-14:20, Room: CMPE238 (BLGM342 (Gr. 01))  
 Tuesdays, 14:30-16:20, Room: CMPE238 (CMPE342 (Gr. 02)) (**LAB.**)  
 Thursdays, 08:30-10:20, Room: CMPE238 (CMPE342 (Gr. 02))  
 Thursdays, 10:30-12:20, Room: CMPE238 (BLGM342 (Gr. 01))  
 Fridays, 08:30-10:20, Room: CMPE238 (CMPE342 (Gr. 01))  
 Fridays, 12:30-14:20, Room: CMPE238 (CMPE342 (Gr. 01)) (**LAB.**)

**Prepared by:** Assoc. Prof. Dr. Yıltan Bitirim

**Date Prepared:** February 15, 2024