

Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
 Mechanical Engineering Department
 2024-2025 Fall Semester
SYLLABUS

Code/Name	MEC 109 / Introduction to Computer and Information Systems
Type	Required
Credit/ECTS	2/2
Hour per Week	2 (1+1+0)
Level/Year	Undergraduate/1
Semester	Fall
Classroom	L 308
Content	Computer systems and components, input/output, and storage. Internet, electronic mail, data, and file transfer. Wired and wireless communication. Text editors, visualizations, spreadsheets, equation solvers, and their applications using common software. Text editing and writing a petition in a text editor program, basic and advanced spreadsheet applications, and presentation preparation techniques. Introduction to scientific problem solving through algorithms, and common programming software. Computational error.

Prerequisites

Textbooks

Primary

JG Brookshear, D Brylow, *Computer Science: An Overview*, 12th edition, Pearson, 2014.
 GM Schneider, J Gersting, *Invitation to Computer Science (Introduction to CS)*, 6th edition, Cengage, 2012.

Supplementary

P Donham, *Introduction to Computer Science*, 1st edition, Cognella Academic Publishing, 2018.
 J Havill, *Discovering Computer Science: Interdisciplinary Problems, Principles, and Python Programming*, 2nd edition, CRC Press, 2020.

Objectives

- To introduce the basics of computers
- To introduce the basic architecture and technologies of the Internet
- To practice in the basic software applications such as text editors and spreadsheets
- To practice for presentation with applications
- To introduce the computational error

Course Outcomes

In this course you will be able to:
 C01 Understand how a computer and its peripheral devices operate
 C02 Understand the importance of the Internet technologies in daily life
 C03 Organize basic text documents at an intermediate level
 C04 Use spreadsheet programs effectively
 C05 Use written presentation effectively
 C06 Awareness of the computational error

Weekly Schedule of Topics

W	Topic
1	Basic computer knowledge, input/output, storage, and data processing
2	Introduction to operating systems, the web, networks, Internet, wired/wireless communication
3	Introduction to basic skills on common computer software (Word processing)
4	Introduction to basic skills on common computer software (Word processing)
5	Introduction to basic skills on common computer software (Spreadsheet applications)
6	Introduction to basic skills on common computer software (Spreadsheet applications)

7	Introduction to basic skills on common computer software (Spreadsheet applications)
8	Introduction to basic skills on common computer software (Spreadsheet applications)
9	Introduction to basic skills on common computer software (Spreadsheet applications)
10	Introduction to basic skills on common computer software (Spreadsheet applications)
11	Introduction to basic skills on common computer software (Presentation preparation)
12	Introduction to basic skills on common computer software (Presentation preparation)
13	Introduction to scientific problem solving, and common programming software
14	Common programming software and computational error

Professional Contribution Understand the place and importance of computer science and programming in mechanical engineering

Contribution to Program Outcomes*

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	5	3	3	5	0	0	5	4	1	4	0
CO2	5	3	3	5	0	0	5	4	1	4	0
CO3	1	0	0	0	1	2	5	3	1	5	2
CO4	3	2	5	5	0	0	0	5	1	5	3
CO5	3	3	3	5	0	0	5	4	1	5	0
CO6	5	3	3	5	0	0	5	4	1	4	0

* Contribution Level | 0: None | 1: Very Low | 2: Low | 3: Medium | 4: High | 5: Very High

Special Conditions

- Students work in groups for presentations.
- The consequence of violation of the attendance rule is to receive a grade of NA.

Requirements

Evaluation	Midterm Exam	30%
	Quiz, Assignment	30%
	Final Exam	40%
	Total	100%

Rubric

Course Policy

1. You must attend at least 80% of the sessions including add-drop period.
2. Be in the class on time.
3. English should always be used to communicate with one another.
4. Mobile phone should be switched off and put away during the class.

Cheating & Plagiarism

- Copying or letting someone to copy your work on exams, assignments, or reports is cheating.
- Cutting and pasting text, figures and tables from the web sources or any other electronic source is plagiarism.

Instructor

Name/Surname	Alparslan Topcu	Email	alparslan.topcu@alanya.edu.tr	
Room	230	Office Hours	Monday	: 13:30 – 14:30
			Wednesday	: 13:30 – 14:30

Prepared by Alparslan Topcu on August 28, 2024