

Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
 Mechanical Engineering Department
 2022-2023 Fall Semester
SYLLABUS

Code/Name	MEC 101 / Introduction to Mechanical Engineering
Type	Required
Credit/ECTS	3/3
Hour per Week	2 (2+0+0)
Level/Year	Undergraduate/1
Semester	Fall
Classroom	D206
Content	Overview of the major fields of mechanical engineering including design and manufacturing, theory of machines, solid mechanics, fluid mechanics, thermal sciences, and energy systems. Project planning and implementation. Introductory concepts of engineering design process and statistical methods. Oral and written presentation and professional writing. General and professional ethics. Invited speakers from the graduates and industry.

Prerequisites

Textbooks	<p>Primary J Wickert, K Lewis, <i>An Introduction to Mechanical Engineering</i>, 4th edition, Cengage Learning, 2020.</p> <p>Supplementary</p>
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Objectives	<ul style="list-style-type: none"> • To familiarize first year mechanical engineering students with the major • To provide pillars of mechanical engineering and main applications • To raise awareness in engineering design, analysis, and professional ethics
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Course Outcomes	In this course you will be able to: C01 Outline the scope and applications of mechanical engineering C02 Classify fundamental areas and main courses of mechanical engineering C03 Organize project planning and implementation C04 Demonstrate engineering design process and analysis methods C05 Use oral and written presentation effectively C06 Practice professional responsibilities and ethics.
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Weekly Schedule of Topics

W	Topic
1	Why mechanical engineering?
2	Introduction to design and manufacturing
3	Introduction to theory of machines
4	Introduction to solid mechanics
5	Introduction to energy
6	Introduction to fluid mechanics
7	Project planning and implementation
8	Engineering design process
9	Statistical methods
10	Oral and written presentation
11	Professional responsibility and ethics
12	Invited speaker from the graduates or industry

13 Invited speaker from the graduates or industry

14 Invited speaker from the graduates or industry

**Professional
Contribution**

Understand the field of mechanical engineering and its applications

Contribution to Program Outcomes*

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

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

Special Conditions • Students work in groups for project and presentations.

Requirements

Evaluation	Midterm Exam	40%
	Quiz, Assignment	15%
	<u>Final Exam</u>	45%
	Total	100%

Rubric

Course Policy

1. Students are required to attend at least 70% of the theoretical and 80% of the courses with lab/application sessions including add-drop period. Otherwise, you will receive a grade of DZ. Health reports and other official or nonofficial excuses are not accepted.
2. Be in the class on time. Late attendance may result in grade deductions.
3. English should always be used to communicate with one another.
4. Mobile phone should be switched off and put away during the class.
5. Illegal copies of the textbooks and other illegal course materials cannot be used for the classwork and exams.

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.
- A consequence of academic dishonesty is to receive a grade of FF for the course.

Instructor

Name/Surname	Mehmet Kanoglu	Email	mehmet.kanoglu@alanya.edu.tr
Room	121	Office Hours	Tuesday: 15:30 – 16:30 Thursday: 15:30 – 16:30

Prepared by Mehmet Kanoğlu