

Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
Mechanical Engineering Department
2021-2022 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	D 102
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>
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
Course Outcomes	<p>In this course you will be able to:</p> <p>CO1 Outline the scope and applications of mechanical engineering CO2 Classify fundamental areas and main courses of mechanical engineering CO3 Organize project planning and implementation CO4 Demonstrate engineering design process and analysis methods CO5 Use oral and written presentation effectively CO6 Practice professional responsibilities and ethics.</p>
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	<ul style="list-style-type: none"> Students work in groups for project and presentations. The consequence of violation of the attendance rule is to receive a grade of NA.
---------------------------	--

Requirements	
Evaluation	Midterm Exam 40% Quizzes 10% Final Exam 50% Total 100%

Rubric	
Course Policy	1. You must attend at least 70% 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. 5. No talking to classmates during class no matter what the subject is.
Cheating & Plagiarism	<ul style="list-style-type: none"> 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. The consequence of academic dishonesty is to receive a grade of F for the course.

Instructor			
Name/Surname	Mehmet Kanoglu	Email	mehmet.kanoglu@alanya.edu.tr
Room	121	Office Hours	Monday: 12:00 – 13:00 Tuesday: 12:00 – 13:00

Prepared by Mehmet Kanoğlu on Sep. 7, 2021