Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering
Mechanical Engineering Department
2023-2024 Spring Semester
SYLLABUS

Code/Name	MEC 104 / Computer Aided Technical Drawing
Type	Required
Credit/ECTS	5/5
Hour per Week	4 (2+2+0)
Level/Year	Undergraduate/1
Semester	Spring
Classroom	L208 / L308
Content	Graphical interpretation of orthographic projection to include auxiliary views, section views, dimensioning, translation of design instructions into detail and assembly drawings, drawing conventions including referencing and surface finish notation, election of tolerances based on design requirements.
Prerequisites	
Textbooks	***Primary*** Giesecke, F.E., et al, Engineering Graphics, MacMillan Pub, New York, 2004. ***Supplementary*** Jensen, C.H. Engineering Drawing and Design, McGraw-Hill, 2008.
Objectives	• Learning the standard techniques of preparing engineering drawings, reading and interpreting drawings, and solving three-dimensional technical problems that require the application of descriptive geometry and graphical analysis, computer aided drafting and modeling • Present standard 2D blueprint and solid models.
Course Outcomes	In this course you will be able to: CO1 Draw 2D drawings in standard 2D blueprint forms CO2 Apply dimensioning in 2D drawings CO3 Design and align given parts in an assembly CO4 Print out and present 2D drawing CO5 Create solid model of a part C06 Modify 2D & 3D designs

Weekly Schedule of Topics

W	Topic
1	Introduction to computer aided drawing
2	Parametric design & basic drawing functions
3	Orthographic projection and multi-view drawings
4	Principles and applications of dimensioning
5	Creating sectional views
6	Modifying commands
7	Three dimensional design and creating parts in 3D drafting
8	Three dimensional design and creating parts in 3D drafting
9	Applying constraints and dimensioning in solid modeling
10	Extruding, modifying and redefining, feature construction
11	Transferring 3D parts to drafting detailing
12	Assembly modeling and assembling drawing
13	Surface modeling

14	Design project presentations

Contribution to Program Outcomes*

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	5	2	3	2	1	2	0	0	2	0	0
CO2	5	2	3	2	1	2	0	0	2	0	0
CO3	5	2	3	2	1	2	0	0	2	0	0
CO4	5	2	3	2	1	2	0	0	0	0	0
CO5	5	2	3	2	1	2	0	0	0	0	0
CO6	5	2	3	2	1	2	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 presentation and assignment. • The consequence of violation of the attendance rule is to receive a grade of **NA.**
Requirements	Basic knowledge of statics
Evaluation	Midterm Exam 50% Final Exam 50% Total 100%
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. 5. You cannot talk to your friends during class no matter what the subject is.
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. • The consequence of academic dishonesty is to receive a grade of **F** for the course.

Instructor

Name/Surname	Fatih Darıcık	Email	fatih.daricik@alanya.edu.tr
Room	233	Office Hours	Tuesday: 10:30 – 11:30 Tuesday: 13:30 – 14:30

Prepared by Fatih Darıcık on Feb. 04, 2024