ATILIM UNIVERSITY Mechanical Engineering

COURSE SYLLABUS

[ME201] STATICS

Course Information for 2025-26 Fall Semester (Section 1) **Instructor**: Assist. Prof. Dr. Murat Büyük

Office Hours: 09:30-11:20 Mondays (or by appointment) | Room: Dept. of ME, 3030 murat.buyuk@atilim.edu.tr

Course Code: ME201 Course Section: 1 Course Title: Statics Course Credit:3 Course ECTS:5.0

Course Catalog Description:

Fundamental concepts and principles of mechanics. Introductory vector analysis. Statics of particles. Statics and equilibrium of rigid bodies in 2-D and 3-D. Equivalent system of forces and couples. Centroids and centers of gravity. Analysis of simple structures; trusses, frames and machines. Analysis of simple beams. Friction. Moments of Inertia. Method of virtual work.

Prerequisites:

No prerequisites

Course Objectives:

At the end of this course the students will know the basic principles of vector mechanics for static problems

Outline (might change slightly):

Session Topic

1	STATICS	OF PA	RTICLES
---	---------	-------	---------

- 2 RIGID BODIES: EOUIVALENT SYSTEMS OF FORCES
- 3 RIGID BODIES: EQUIVALENT SYSTEMS OF FORCES
- 4 EQUILIBRIUM OF RIGID BODIES
- 5 EQUILIBRIUM OF RIGID BODIES
- 6 DISTRIBUTED FORCES: CENTROIDS AND CENTERS OF GRAVITY
- 7 ANALYSIS OF STRUCTURES
- 8 ANALYSIS OF STRUCTURES
- 9 FORCES IN BEAMS AND CABLES
- 10 FORCES IN BEAMS AND CABLES
- 11 FRICTION
- 12 FRICTION
- 13 DISTRIBUTED FORCES: MOMENTS OF INERTIA
- 14 DISTRIBUTED FORCES: MOMENTS OF INERTIA

Textbook(s):

- Course notes will be provided. (Course Notes will be provided through Moodle)
- Vector Mechanics for Engineers STATICS by F.P. Beer, E.R. Johnston Jr. and E.R. Eisenberg, ISBN 978-007-125765-7 (Supplementary)

Grading Policy:

Midterm-1 Exam	25 %
Midterm-2 Exam	25 %
Attendance	15 %
Final Exam	35 %



COURSE SYLLABUS

Assessment:

(wrt: https://www.atilim.edu.tr/en/ects/page/3498/grading)

Catalog Grading will strictly be utilized.

Letter	Coefficient	Score
Grade	Coefficient	intervals
AA	4,00	90-100
BA	3,50	85-89
BB	3,00	80-84
CB	2,50	75-79
CC	2,00	70-74
DC	1,50	65-69
DD	1,00	60-64
FD	0,50	50-59
FF	0,00	0-49
NA	0,00	*

Exam Dates:

MIDTERM-1: [TBD by the Department]
MIDTERM-2: [TBD by the Department]
FINAL: [TBD by the Department]
MAKE-UP: [TBD by the Department]

Class Attendance:

Students should attend all classes on a regular basis so that they can benefit from the course at maximum level. Please note that the attendance will have an impact of 15 % on grading. The lectures will be given face-to-face. All students must sign an attendance sheet in class that resembles as a memorandum of understanding for the details in the syllabus.

Final Exam and Make-up Exam Entrance Conditions:

There will be only one make-up exam after the Final exam for those of you who have special conditions and have been unable to attend any of the examinations with a proof and supporting documents. The make-up examination may not resemble the other examinations as regards its form and content and will take place shortly after the final exam. The grade obtained in the make-up examination will be treated as the grade obtained in the unattended examination only. All announcements and procedures for the make-up examination are revealed right after the final exam (registration, exam date, rules and regulations). When available, please follow the instructions for the registration. A medical report approved by the medical services of the university will be required. Since the students who will have an advantage on taking a make-up exam, by studying longer or learning the types of similar questions etc. one should expect a level of higher difficulty for the make-up examination.

Students with Disabilities:

Students who experience difficulties due to their disabilities and wish to obtain academic adjustments and/or auxiliary aids must contact Office for Students with Disabilities and/or course instructor and the advisor of students with disabilities at academic departments as soon as possible. For detailed information, please visit the website of Disability Support Office: https://www.atilim.edu.tr/en/engelli-ogrenciler-ofisi/page/1413/office-for-students-with-disabilities

Student Development and Counseling Center:

Atılım University Student Development and Counseling Center is established to assist our students in realizing their potential in the fields of psychological, educational and social development and to provide consultancy services on the path to success in their education.

https://www.atilim.edu.tr/tr/od/page/100/ogrenci-gelisim-ve-danisma-merkezi

Conditions and dates can be modified through announcements during the class hours. Follow Moodle Portal.