

Fall 2017  
**ME 353 Fluid Mechanics**  
Ali Ecdar

lecture hours: TTThTh 3434 (M 2200)

office hours: ThTh 78 (M 4225)

course web page: <http://ecdar.boun.edu.tr/fall17/me353.html>

course description: Fundamental principles of fluid mechanics and their application to engineering problems. Fluid statics. Fluid flow concepts. Control-volume analysis. Conservation equations and applications. Dimensional analysis and similitude. Flow of viscous fluids, simple laminar flow systems, turbulence, internal and external flow applications.

prerequisites: Math 201 & Math 202

textbook: "*Munson's Fluid Mechanics*" by Gerhart, Gerhart & Hochstein

list of topics:

- Introductory Topics (Chapter 1)
- Fluid Statics (Chapter 2)
- Introduction to Fluid Dynamics (Chapter 3)
- Fluid Kinematics (Chapter 4)
- Control-Volume Analysis (Chapter 5)
- Differential Analysis (Chapter 6)
- Dimensional Analysis and Similitude (Chapter 7)
- Internal Flow (Chapter 8)
- External Flow (Chapter 9)

grading:

Midterm Exam 1 – October 19, 2017 – 20 points

Midterm Exam 2 – November 16, 2017 – 20 points

Midterm Exam 3 – December 14, 2017 – 20 points

Final Exam – 40 points (scheduled by the Registrar's Office)

attendance:

- Attendance to lectures is required.
- Announcements made during lectures will be assumed "posted" to all students.
- Your final exam may also serve as a midterm exam make-up, i.e., your "final exam points divided by two" may make up for AT MOST ONE missed midterm exam grade, ONLY IF you have missed that midterm exam for medical reasons AND if you have submitted proper documentation (no later than the first lecture following the dates of absence indicated on your document) AND if you have not missed the final exam. No make-up points will be awarded for any additional exams missed.
- If you miss the final exam, you may take a final exam make-up ("excuse exam") if you are granted that option by the make-up-exam committee. However, you may not use points earned by that exam to make-up for a missed midterm exam, i.e., final exam make-up may not also serve as a midterm exam make-up.