

310, Fluid Mechanics II
Course Policies and Syllabus
Spring 2016-2017

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Schedule: Lectures: Tuesday, 10:30 -12:15 (room: TRS/D204)
Wednesday : 10:30 -12:15 (room: TRS/D204)

Textbook: “*Fluid Mechanics Fundamentals and Applications*”, Yunus Cengel and John Cimbala, McGraw-Hill, 3rd Edition

Recommended Reading: 1-MUNSON, B. R., YOUNG, D. F. and OKIISHI, T. H.,
Fundamentals of Fluid Mechanics , 5th ed., John Wiley and Sons, Inc., New York, 2006

2-WHITE, F. M., *Fluid Mechanics* , 5th ed., McGraw Hill Book Company, New York, 2003

Prerequisites: Basic knowledge of thermodynamics and differential equations.

Grading: Course grading is based on the following scheme:

Problem sets, quizzes	20%
Midterm exam	30%
Final exam	50%

Homework: Given approximately once a week. Discussion of problems with other students is encouraged; however, each student is responsible for his/her own work. Copying from a classmate will be considered as cheating and be dealt strictly according to university policies. Late homeworks will not be accepted. If you are sick or have a family emergency, please let me know beforehand.

Exams: There will be one midterm exam and a comprehensive final exam. All examinations given in this course are closed book and closed notes. No make-ups will be given for the examinations unless you have an officially approved medical report.

Syllabus*

- Momentum Analysis of Flow Systems (Chp. 6)
- Dimensional Analysis and Modeling (Chp.7)
- Internal Flow (Chp. 8)
- Differential Analysis of Fluid Flow (Chp. 9)
- Approximate Solutions of The Navier–Stokes Equation (Chp. 10)
- External Flow: Drag and Lift (Chp. 11)
- Compressible Flow (Chp. 12)
- Open-Channel Flow (Chp.13)
- Turbomachinery (Chp.14)
- Introduction to Computational Fluid Dynamics (Chp. 15)

* All material in respective chapters will not be covered.