

Syllabus

ENG 103-2:FLUID MECHANICS

University of California at Davis
Mechanical and Aeronautical Engineering

Meets: MWF 1:10-2:00, 202 Wellman
M 2:10 – 3:00, 129 Wellman

Instructor: Dr. Jason Roney
Office: Bainer 1236A/Saltation Wind-Tunnel Facility
Telephone: (530) 752-8686
Email: jaroney@ucdavis.edu

Textbook: F.M. White, **Fluid Mechanics**, 4th edition, WCB/McGraw Hill, Boston 1999.

Midterm: Tentatively Monday, May 14, 2001 (2 hours)

Final: Tuesday, June 12, 2001 8:00-10:00 a.m.

Last Day of Class: Wednesday, June 6, Also, No Class May 28, 2001

Grading: **Homework*/Quizzes*: 25%**
 Midterm: 35%
 Final (Comprehensive): 40%

*Homework will be due at the beginning of class on the due date. Late policy: 50% off, one day late, and will not be accepted 2 days late. Homework will be assigned in class.

* Quizzes will be announced one week prior to the day and will be periodic throughout the quarter or at the discretion of the instructor.

Course Outline:

A solid overview of Chapters 1-7 from White, 1999 will be covered in addition to supplemental material not in the book.

	Course Chapters
1. Introduction	1.1-1.9
2. Pressure Distribution in a Fluid	2.1 - 2.8
3. Integral Relations for a Control Volume	3.1- 3.6
4. Differential Relations for a Fluid Particle	4.1 - 4.10
5. Dimensional Analysis and Similarity	5.1 - 5.5
6. Viscous Flow in Ducts	6.1 – 6.7
7. Boundary Layers	7.1 – 7.6

Course Outline Subject to Appending as the Quarter Progresses.