ME152A: Fluid Mechanics

Fall 2009

Instructor: Dr. Rouslan Krechetnikov

Contact:

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Prerequisite: Mathematics 5C, ME16, and ME 151A (may be taken concurrently); open to ME

majors only

Format:

Lectures: TUE/THU 9:30-10:45 am in Buch 1930, beginning on September 24.

Textbook (**required**): "Introduction to Fluid Mechanics" by R.W. Fox, P.J. Pritchard, and A.T. McDonald, 7th edition, Wiley (available at the bookstore).

Topics:

Introduction to

- the fundamental concepts in fluid mechanics
- basic fluid properties

Basic equations of fluid flow

Dimensional analysis and similitude

Hydrodynamics

Homeworks: there will be six homework sets, each due at 11:59 pm on Thursday (the assignment box is located to the left of the entrance to the CAD lab, 2243 Engineering II).

Midterm tests: there will be two tests, held during the class

Test 1: Thursday, October 22 Test 2: Thursday, November 19

<u>Policy</u>: closed-book, no collaboration is allowed. There will be no make-up tests. In case when a student misses a test due to a substantiated reason, the term mark may be pro-rated.

Final examination:

Date and time: December 9, 8:00-11:00 am Policy: closed-book, no collaboration is allowed.

Grading policy:

Homeworks: 20%

Tests: 30%

Final exam: 50%