MAE 210A – FLUID MECHANICS I
FALL 2015

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Lectures: Tuesday, Thursday 8:00-9:20am

Office Hours: Tuesday, Thursday 9:30am-11:00pm, EBUII 554

Text Book: Fluid Mechanics
Kundu, Cohen, Dowling, Elsevier

Grading: Homework: 20%, Midterm exam: 30%, Final exam: 50%

Topics:
1. Introduction to Fluid Mechanics
2. Flow kinematics
3. Conservation equations in integral form
4. Conservation equations in differential form
5. Dimensional analysis and physical similarity. Nondimensional numbers.
6. Self-similar solutions.
7. Vorticity dynamics.

ADDITIONAL BIBLIOGRAPHY: