

**COMMONWEALTH GRADUATE ENGINEERING PROGRAM
DISTANCE LEARNING COURSE PLANNING SHEET
UNIVERSITY OF VIRGINIA**

Course: MAE 6310 – Fluid Mechanics
Semester: Fall 2009
Instructor: Richard J. Babarsky
Phone No.: 434-284-2793
Office Address: (off-grounds)

E-Mail Address: rjbabar@comcast.net

Textbook(s): (Student to purchase)

Fluid Mechanics by P.K. Kundu and I.M. Cohen, 4th Edition, Elsevier, 2008

Reference(s): Limit 4

Computer Needs:

Computer Capability:

Software required:
Provided?

Other: Access to Internet; UVA email account to access Collab

See attached syllabus.

Fall 2009
School of Engineering and Applied Science
University of Virginia

Instructor: R. J. Babarsky, Tel. 434-284-2793, FAX 982-2037, rjbabar@comcast.net

GTA: N/A

Class Times: 6:30-7:45 p.m., M/W Room: Thornton A119

Text: *Fluid Mechanics* by P.K. Kundu and I.M. Cohen, 4th Edition, Elsevier, 2008

Prerequisite: Graduate standing.

Course Content

The topics covered are:

- Mathematical Preliminaries
- Physical Properties of Fluids
- Kinematics of the Flow Field
- Equations of Motion
- Irrotational Potential Flow
- Flow of a Uniform, Incompressible, Viscous Fluid
- Flow at Large Reynolds Number
- Optional topics.

All these topics are covered in the textbook however the order may vary. Problems will be assigned from the textbook.

Grading Policy: Grades will be determined by problem sets and a closed book final exam.

Final Exam: December