

## MEGR 3114 Fluid Mechanics

Professor: J. M. Hill  
Office: 269 Duke Centennial Hall  
Hours: Tuesday and Thursday: 2:15 – 3:30  
I will frequently be in my office other days and times. If my door is open, come in.

Websites: <http://webpages.uncc.edu/~hill>  
[MIT Videos](#)

Textbook: *Fundamentals of Fluid Mechanics*, B. Munson, D. Young,  
T. Okiishi, W. Huebsch, Any Edition\*, Wiley  
Note: Any edition of the text is acceptable.

Grading:	3 tests @ 20%	60%
	Homework and long quizzes	12%
	Final Exam	20%
	Two-minute quizzes	8%

### Course Outline

Chapter	Topic
1	Fundamental Concepts, Definitions
2	Review of Fluid Statics
5	Control Volume Analysis, Continuity, Momentum, 1 <sup>st</sup> Law
3	Bernoulli's Equation
4	Reynolds Transport Theorem
7	Similitude and Modeling
8	Viscous Flow in Pipes
9	Flow Over Immersed Bodies, Drag, Lift
11	One-Dimensional Compressible Flow

### Course Policy

Homework will be assigned each class and will be due via Canvas before next class period. No hard copy or late submissions will be accepted for any reason.

If a test or quiz is missed, a grade of zero will be recorded unless the absence is excused by the office of the Dean of Students.

Other than calculators, the use of electronic devices (computers, cell phones, mp3 players, iPods, etc.) is not allowed. ► **No texting during class.** ◀

### Academic Integrity

Students have the responsibility to know and observe the requirements of the UNCC Code of Student Academic Integrity (<http://legal.uncc.edu/policies/up-407>). This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty.

### Calculator Policy

The only calculators allowed for use on tests, quizzes, or on the final exam are those listed on the National Council of Examiners for Engineering and Surveying (NCEES) site at <http://ncees.org/exams/calculator-policy>. These are the same calculators allowed on the FE exam.

\*Since homework will never be assigned from the problems in the book, any edition of the book is acceptable. We will frequently refer to figures and tables in the book, but any edition will have these.

