
SYLLABUS: Aug. 31, Sept. 2 (no recitation on 9/1)  
Fundamental concepts: fluids, basic laws (why fluid mechanics necessarily involves thermal consideration), dimensions and units—Chapter 1  
Sept. 7, 9, 14  
Velocity field, stress field, viscosity, classification of fluid motions (incompressible and compressible flows)—Chapter 2  
Sept. 14, 16, 21, 23  
Fluid statics—Chapter 3  
Sept. 23, 28, 30, Week 6 (Oct. 5, 7)  
Basic equations (integral form of continuity equation and momentum equation)—Chapter 4  
Oct. 19  
**Exam. #1**  
Oct. 12, 14, 21, 26, 28  
Differential analysis of fluid motions—Chapter 5  
Oct. 28, Nov. 2, 4, Week 11 (9, 11)  
Incompressible inviscid flow (Bernoulli equation and introduction to irrotational flows)—Chapter 6  
Nov. 23  
**Exam. #2**  
Nov. 16, 18  
Dimensional analysis and similitude—Chapter 7  
Nov. 30, Dec. 2, 7, 9  
Brief introduction to internal and external incompressible viscous flows/Review  
Dec. 16 (5:15PM to 7:45PM)  
Final exam. (Comprehensive, including materials covered up to Chapter 7)
Grading & Assignments:
- Homework – 10%
- First Midterm – 25%
- Second Midterm—25%
- Final exam—40%

Class Policies:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/.

- Assigned homework’s are due on the date indicated.
- No late work is accepted. Work is late if it is not on my desk or under my office door by 5:00pm on the day that the assignment is due.
- No makeup midterm given without a doctor’s notes submitted and approved in advance.
- No extra credits.