



Department of Civil and Environmental Engineering

CIVE 301 – Fluid Mechanics Laboratory (Fall 2016)

Instructors:

Emily Cook
Room A4A (Engineering Building)
Email: emcook2@mail.colostate.edu
Office Hours: R 10:00 – 11:00 AM
R 2:00 – 3:00 PM

Nicole Opalinski
Room A4A (Engineering Building)
Email: nicoleopalinski@gmail.com
Office Hours: T 9:30 – 11:00 AM
F 12:00 – 1:30 PM

Lab Meeting Times:

L01: Monday 2:00 PM – 4:50 PM with Emily Cook
L02: Tuesday 12:00 PM – 2:50 PM with Nicole Opalinski
L03: Tuesday 3:00 PM – 5:40 PM with Nicole Opalinski

Class Website: <https://colostate.instructure.com/>

Text: None required. All lab instructions will be posted on Canvas. Print out and bring with you to lab.

Course Objectives: This lab has two objectives.

- To impart each student with a better understanding of the material covered in lecture through participation in simple experiments.
- The development of technical writing skills.

Attendance: Students must participate in the actual lab in order to receive credit for the report. If a student must miss a lab, it is the student's responsibility to inform the TA ahead of time so arrangements can be made to attend one of the other lab sections. Students who miss labs without making arrangements with the TA will not receive credit for the lab.

Course Evaluation: There will be 10 labs that account for a total of 1100 points. The total weight (points) for each lab is shown in the Lab Schedule below. The scores of any labs will not be replaced or dropped. Labs are due the following week at the beginning of the regularly scheduled lab time. Late labs will be accepted up to one week late for half credit.

Safety: Professional conduct will be expected while in the lab. Horseplay will result in the student's immediate removal and no grade for that lab. Food and open beverages are not allowed in the lab. Resealable beverage containers are allowed. Do not touch equipment unless the current lab requires it. If there is a spill, accident, or equipment breakage, inform the lab instructor immediately. Close toed shoes are recommended to prevent injuries.

Lab Schedule

Week Starting	Topic	Lab Type	Points
22-Aug (1)	No Lab		
29-Aug (2)	Lab 0: Lab Introduction***		
5-Sept (3)	Lab 1: Density and Specific Gravity***	Team	100
12-Sept (4)	Lab 2: Viscosity	Team	100
19-Sept (5)	Lab 3: Buoyancy	Team	100
26-Sept (6)	Lab 4: Fluid Rotation	Individual	100
3-Oct (7)	No Lab (Week of Midterm 1)		
10-Oct (8)	Lab 5: Momentum	Individual	100
17-Oct (9)	Lab 6: Pipe Flow and Fluid Friction	Individual	150
24-Oct (10)	Lab 7: Cavitation	Individual	50
31-Oct (11)	Lab 8: Drag on a Cylinder	Team	100
7-Nov (12)	No Lab (Week of Midterm 2)		
14-Nov (13)	Lab 9: CFD	Individual	150
21-Nov (14)	No Lab (Fall Recess)		
28-Nov (15)	Lab 10: Open Channel Flow	Team	150
5-Dec (16)	No Lab		

*** Monday Lab Group L01 will complete Lab 1: Density and Specific Gravity the week of August 29 due to the Labor Day holiday conflict.

Note: Lab schedule is subject to change.