CEE4200A – Hydraulic Engineering – Georgia Tech – Fall 2026

Professor: Dr. Hermann Fritz
Office: Mason 2237
Contact info: https://canvas.gatech.edu/
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Office Hours: TBD
Class Meeting: MW 11:00am-11:50am, Mason 2117
Mode: Fully residential.

Lab Meeting: Mason 1230
A1 Tuesday: 12:30-3:15pm
A2 Tuesday: 3:30-6:15pm
A3 Tuesday: 8:00-10:25am
A4 Thursday: 12:30-3:15pm

TA: A1 (Tuesday): TBD
A2 (Tuesday): TBD
A3 (Thursday): TBD
A4 (Thursday): TBD
TA Office hours: TBD

Prerequisites: CEE3040 Fluid Mechanics or equivalent.

Text: Munson, Young, and Okiishi's, *Fundamentals of Fluid Mechanics*, 9th Edition, John Wiley and Sons (2021) by Gerhart. This book or bundle or e-book is required for the course and will be supplemented by lecture notes. The wileyplus code comes with an e-book access for a given time period. PDFs of lecture notes will be posted on canvas on a weekly basis.

Homework: Late homework will not be accepted without a valid excuse. There will be typically weekly assignments. You are encouraged to work in groups, but independent homework solutions must be turned it. Homework will be assigned in Canvas using Wileyplus.

Exams: Midterm Exam 1: TBD
Midterm Exam 2: TBD
Final Exam: TBD
Closed book exams, plus one page (8-1/2 by 11) (single side) of equations is allowed for the first midterm and increases by one side with each exam.

Grades: Your final grade will be based on the better of the two below schemes:

A) Graded homework problems (15%) and laboratory reports (15%), two mid-semester exams (20% each), and final exam (30%).

B) Graded homework problems (20%) and laboratory reports (20%), best mid-semester exam (25%), and final exam (35%).

Grades will be made available via https://canvas.gatech.edu/

Policies: Homework: homework problems will be assigned and are due at 11:59 pm on the due date. Late homework will receive 1/2 credit. Homework will be submitted through Canvas via the WileyPlus online system, in which you have online access to the textbook and

other supplemental materials. You must register for WileyPlus to access the homework assignments in Canvas.

Honor Code: This course will be conducted under the guidelines of the Georgia Tech Academic Honor Code. www.honor.gatech.edu
Unauthorized use of any previous semester course materials, such as tests, quizzes, homework, projects, and any other coursework, other than provided by the instructor, is prohibited in this course. Using these materials will be considered a direct violation of academic policy and will be dealt with according to the GT Academic Honor Code.

Course Topics: Chapter Sections	**Topics**
Ch. 8:1-5	Viscous Flow in Pipes
Ch. 12:1-8	Turbomachinery
Ch. 9.3-4	Lift and Drag
Ch. 10:1-6	Open Channel Flow
	Environmental Fluid Mechanics
	Sediment Transport
	Computational Fluid Mechanics

Lab Reports: You will prepare a written report for each lab session consisting of multiple experiments. You are encouraged to work in groups, but independent reports must be turned in electronically via https://canvas.gatech.edu/. Reports are due 2 weeks after performing the experiment. Late reports will not be accepted without a valid excuse.

Lab Assignments: Will be made available prior to each session via https://canvas.gatech.edu/.

Lab Attendance: Your attendance and participation is mandatory. In order to pass this course you must attend, participate in, and prepare a report for each laboratory experiment. If time conflicts arise, be sure to make appropriate arrangements in *advance*.

Lab Schedule:
TBD (A1 & A2 & A3) Oil Flow in Pipe
TBD (A4) Oil Flow in Pipe
TBD (A1 & A2 & A3) Force Due to Jet Deflection
TBD (A4) Force Due to Jet Deflection
TBD (A1 & A2 & A3) Centrifugal Pump
TBD (A4) Centrifugal Pump
TBD (A1 & A2 & A3) Fall Velocity of Spheres
TBD (A4) Fall Velocity of Spheres
TBD (A1 & A2 & A3) Hydraulic Jump
TBD (A4) Hydraulic Jump