Math 132A: Optimization: Theory and Applications   Winter 2025

INSTRUCTOR	Paul J. Atzberger	*Office Hours*: TR 10:45 – 12:15pm	
	http://atzberger.org/	*Location:* SH 6712 / GIRV 1115.	

CLASS TIMES   TR 9:30 – 10:45pm
GIRV 1115.

DESCRIPTION   This course discusses topics in optimization which is concerned with the minimization or maximization of objective functions along with constraints on permissible solutions. The course covers different types of problems that can be treated in this form along with development of theory and algorithms for their solution. The course will also discuss motivations and applications in the sciences and engineering, decision problems, and machine learning methods. More information can be found on the course website.

PREREQUISITES Calculus and Linear Algebra.

TEXTBOOKS   *An Introduction to Optimization (fifth edition)* by E. Chung, W. Lu, S. Zak.

GRADING

Homework/Quizzes	30%
Midterm	30%
Final Exam/Project	40%

POLICIES   Assignments will be assigned in class and posted on the course website. Prompt submission of homeworks will be required. While no late homework will be accepted, one missed homework will be allowed without penalty. While it is permissible for you to discuss materials with classmates, the submitted homework must be your own work.

There is a policy of no video or pictures to be taken during lectures. Instead, one should take notes and pay particular attention. There is also a policy of no texting, e-mailing, or social media during the class. It is hoped one is avoiding such distractions to make the most of the class.

EXAMS   A midterm exam will be on Thursday, February 13.
Final exam (see university calendar).

TOPICS   See the website for additional information.

WEBSITE   http://teaching.atzberger.org/