

MAC0143 : Nonlinear Programming (I)

Fall, 2026

Contact Information

Instructor: Jein-Shan Chen
Classroom: M212
Time: Tuesday, 13:20 - 16:20 pm
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Office Hours

You are welcome to drop by my office when I am available (usually week-day mornings), or feel free to make an appointment.

Textbook

There are five references for this course. We will mainly read the first one in this semester.

1. Lectures on Nonsmooth Optimization, by Qian Jin, Texts in Applied Mathematics, vol. 82, Springer, 2025.
2. Nonlinear Programming, by D.P. Bertsekas, 3rd edition, Athena Scientific, 2016.
3. Nonlinear Programming: Theory and Algorithms, 3rd edition, by M. Bazaraa, H. Sherali, and C. Shetty, 2006.
4. Convexity and Optimization in $\mathbb{R}^n$, by L. D. Berkovitz, 2002.

5. Numerical Optimization, by J. Nocedal and S. Wright, 2006.

Homework and Exams

The good news is that there will be no homework assignments or examinations for this course. However, as this is a graduate-level course, you are expected to demonstrate a strong ability for independent study. Instead of weekly homework or exams, all enrolled students will take turns presenting the course materials. Through this process, I hope that you will develop a deeper understanding of the subject and benefit substantially from this form of academic training.

Grades

Since there are no homework assignments or examinations in this course, active participation and engagement in class discussions are essential. Accordingly, your final grade will be determined based on the following two components:

Attendance and Participation in Discussion	50 %
Presentation	50 %

From time to time, you may also be required to attend conferences, workshops, or other academic activities related to the course content. Participation in such events will be counted toward your attendance and participation grade.