

CAAM 335: Matrix Analysis (Fall, 2009)

- **Instructor:** Yin Zhang, Room: DH 3090, Phone: X5744.
- **Office Hours:** Wed: 1:00–3:00pm or by appointment.
- **Course Notes:** <http://www.caam.rice.edu/~cox/main.pdf>
- **Course Webpage:** <http://www.caam.rice.edu/~zhang/caam335/>
- **Prerequisite:** MATH 212 and CAAM 210 (Multivariable calculus, Matlab Programming)

- **Work and Grading:**

Exams/Project 60%: Two take-home (timed, closed-book) exams and a Matlab project will each account for 20% of the final grade.

Homework 40%: Homework problems, including Matlab problems, will be assigned online roughly on weekly basis, accounting for 40% of the final grade.

Attendance: Class attendance will be used to decide borderline grades.

Late submission: Up to 2 late submissions will be accepted for 90% of the credit until a week after the due dates (or otherwise with the permission of the instructor under special circumstances). Subsequent late submissions will be subject to 20% or higher penalty within the instructor's discretion.

Dispute: Check the graded homework carefully as soon as it is returned. If you detect an error in grading, notify your instructor immediately. Homework scores cannot be changed two weeks after they are assigned.

- **Honor Code Policy:**

Exams and computer project must be your individual, unassisted effort with a signed honor code pledge. Students can discuss homework assignments with others on understanding and ideas, but must write out solutions and codes individually. Copying or sharing any part of an assignment, especially computer codes, is strictly prohibited. *You may not seek solutions from previous sections of this class.*

- **Coverage:**

We will approximately cover the materials in the lecture notes, with some additions and omissions (e.g., different examples may be used). The first exam will roughly cover materials in the first 6 chapters of the notes, the the second exam will cover the rest. The computer project will be on a (bilinear) least squares problem with an optimization component.

- **Recommended Reading:**

- Carl Meyer, *Applied Matrix Analysis and Linear Algebra*
- Gilbert Strang, *Linear Algebra and Its Applications*, 3rd ed.
- Gilbert Strang, *Introduction to Applied Mathematics*
- Lars Ahlfors, *Complex Analysis*, 3rd ed.
- R. V. Churchill, & J. W. Brown, *Complex Variables and Applications*, 5th ed.
- D. J. Higham & N. J. Higham, *MATLAB Guide*

- **Notice on Disability:** See the course webpage.