

Math 575 Honors: Discrete Mathematics II, Spring 2023

This course serves as an introduction to Graph Theory. Topics include trees, matchings, connectivity, coloring, planarity, cycles, and additional special topics. Several graph algorithms will also be introduced. Students must have a strong grasp of proof writing.

Instructor: Ruth Luo; ruthluo@sc.edu; office: Leconte 406

Office Hours: Mondays 2:30-4:00pm (Leconte 406); Tuesdays 12:30-1:30pm (online via Blackboard); and by appointment

Course Website: Blackboard

Lecture: MWF 9:40-10:30am, Leconte 348

Credit Hours: 3

Textbook: *Introduction to Graph Theory*, 2nd Edition, by Douglas West. *The textbook is recommended but not required. Additional (free) resources will be provided.*

Graded Components:

- **Homework:** There will be 11 written homeworks, assigned weekly and due on Wednesdays. You may drop your lowest homework. A small amount of extra credit will be given for typing homeworks using L^AT_EX.
- **Midterms:** There will be two 50 minute midterms in class. Tentatively, the midterms will be scheduled for **Friday 2/17 and Friday 4/7**.
- **Final:** There will be one 150 minute final exam. Tentatively, the exam is scheduled for **Monday 5/1 at 9:00am**.

All midterms and final are *closed note and closed book*. You may use your lecture notes and textbook while completing your homework. You may also work on the homework with other students in the class, but every student must independently write their solutions.

Grade Breakdown:

- 50% - Homeworks (11 total, drop 1 lowest, best 10 worth 5% each)
- 30% - Midterms (2 total, worth 15% each)
- 20% - Final Exam

Your final grade will be assigned using the following scheme:

[100, 90] A; (90, 86] B+; (86, 80] B; (80, 76] C+;
(76, 70] C; (70, 66] D+; (66, 60] D; (60, 0] F

In addition, there may be an added curve depending on the distribution of scores at the end of the semester.

Academic Integrity: The use of solution manuals, online homework help sites such as Chegg, etc. are forbidden. Any suspicious behavior will be reported to the academic integrity office.

See https://sc.edu/about/offices_and_divisions/student_conduct_and_academic_integrity/ for more information.

Attendance policy: As per university policy, unexcused absence from more than 5 percent of the scheduled class sessions is excessive and the instructor may choose to exact a grade penalty for such absences. As such, attendance is **required**. All excused absences must be documented through the Student's Ombuds office. You should arrange with me as early as possible to make up assignments, quizzes, and exams missed during excused absences.

Americans with Disabilities Act: Contact the Office of Students Disability Services if you require special accommodations. You should contact them as early as possible as it may take time to set up the needed accommodations.