

Discrete Mathematics for Computer Science

University of South Carolina

Department of Mathematics

Spring 2025

Course Information

Instructor:	Chase Fleming	Course:	MATH 174
Email:	cf17@email.sc.edu	Section:	J10/JG1
Office Location:	LeConte 115	CRN:	55799/59190
Office Hours:	Online, Wednesday 4-5, Friday, 11-12		
Credits:	3		

Meeting Information

Location	Day	Time
Online	Monday, Wednesday	2:20 pm - 3:35 pm

Course Description and Objectives

Learning Outcomes: Students will gain mastery of concepts in discrete mathematics. Connections to computers and programming are emphasized when possible. In particular, students will have a fundamental understanding of: logic, number theory, sequences, series, recursion, mathematical induction, set theory, enumeration, functions, relations, graphs and trees.

Required Materials

Textbook: *Discrete Mathematics and Its Applications, Seventh Edition*, Kenneth H. Rosen, ISBN 0-07-338309-0

For a free online version of the above textbook, see [this link](#).

Course Policies and Expectations

Attendance: As discussed in [UofSC attendance policies](#), unexcused absences for more than 10 percent of the scheduled class session is excessive and I reserve the right to exact a grade penalty for such absences.

Participation: Participation is critical for the learning environment of this classroom. Students are expected to attend every class meeting. Students will be expected to contribute to meaningful discussion during both lecture and group work.

Cell Phones: Cell phones are *not* permitted. Keep your phone on silent and stowed away. Students will be given one warning. Any subsequent infraction will result in the student being asked to leave the class.

Calculators: Calculators are **not** permitted during exams. You may use a calculator for your homework, although most problems should be doable without a calculator, and you are recommended to do your homework without using a calculator unless it seems necessary.

Academic Integrity: Students are expected to be familiar with the Honor Code and Code of Conduct. Any suspected violations of the Honor Code will be reported to the Office of Student Conduct and Academic Integrity. “Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline.” For more information visit: [Student Conduct and Academic Integrity](#).

Students with Disabilities: The Student Disability Resource Center’s purpose is to provide all students access to a fair and effective learning environment. If you require any accommodations, register with the SDRC. Once I receive notification, I will work with you to ensure that you have every opportunity to succeed. For more information visit: [Student Disability Resource Center](#).

Late Policy: Unless exceptional circumstances, homework turned in late will receive a 50% deduction. If you submit it more than a week late, I will grade it for feedback, but you will receive a grade of 0 for said homework.

Make Up Policy: Exams can be made up *only* in the case of an emergency, and *only* if you request a make-up *before* the scheduled time. It is your responsibility to contact me within a reasonable time frame to request a make-up exam.

Assignments

Homework: Homework will be assigned on Mondays, and due before class the following Monday. You will be given a `HomeworkN.zip` file which will contain the problem set. You are expected to complete your homework using L^AT_EX. You are to submit, on Blackboard, your completed assignment in the form of a PDF or .tex file. If your submission is not of this form, it will not be graded (if your .tex file does not compile, it will not be graded either). Feedback on your homework will be posted before the start of the next week. If, for an exceptional reason, you are unable to submit your homework, you can send me an email **before** class with the reason and said homework. This reason needs to meet the criteria for an excused absence as per [the UofSC policy](#).

Exams: The three exams will directly reflect the material covered in the class and the homeworks. The dates will be announced in class at least one week in advance.

Final Exam: The final exam is *cumulative* and will take place on Monday, May 5th.

Evaluation

Type	Weight	Grade	Percentage
Participation	10%	A	100-90%
Homework	25%	B+	89-87%
Exam 1	15%	B	86-80%
Exam 2	15%	C+	79-77%
Exam 3	15%	C	76-70%
Final Exam	20%	D+	69-67%
Total	100%	D	66-60%
		F	59% and below

Support

Office Hours: Past students have found office hours greatly beneficial. Feel free to drop by often; the earlier in the semester the better.

Math Tutoring Center: Provides graduate student tutors who are willing and able to help students better understand mathematical concepts. For more information visit: [Math Tutoring Center](#). Note : The MTC is in LeConte building, room 102.

Tips: A mathematics class is often built like a pyramid. We start with the bottom of the pyramid, and build from there. This class is no different. It is strongly recommended for your success in this class that you start the semester working hard, and never fall behind. Most of what we see in this class will be used or referred to later in the class. If there is a concept or idea that you are having a hard time with, come see me and make sure you understand it as soon as possible. To succeed well in this class, you should expect to spend two hours studying and/or doing homework for every hour we spend in class.

Student Success Center: Your success in this course is important. That is why the instructor has partnered with the Student Success Center (SSC) to assist you in better understanding course material and to aid you on your path to success. Resources available to students in this course include: *Peer Tutoring*, *Supplemental Instruction (SI)*, and *Peer Success Consultations*. Your instructor may communicate with the SSC regarding your progress throughout the semester. If contacted by the SSC, please schedule a Success Consultation immediately as this indicates your instructor is concerned about your progress in this course. Referrals are not punitive, and any information shared by your professor is confidential and subject to FERPA regulations. SSC services are offered to all UofSC undergraduates at no additional cost. Please call (803) 777-1000, visit our website ([Student Success Center](#)), or come to the SSC in the Thomas Cooper Library (Mezzanine Level) to check schedules and make appointments.

Important Dates

Event	Date
Classes Begin	Jan. 13
Dr. Martin Luther King, Jr. Service Day (no classes)	Jan. 19
Last day to change/drop a course without a grade of “W” being recorded	Jan. 20
Spring Break (no classes)	Mar. 8-15
Last day to drop a course or withdraw without a grade of “WF” being recorded	Mar. 30
Last Day of Classes	Apr. 27
Final Exam	May 5th

Syllabus is tentative and subject to change.