

Discrete Mathematics for Computer Science

University of South Carolina

Department of Mathematics

Spring 2026

Course Information

Instructor:	Chase Fleming	Course:	MATH 174
Email:	cf17@email.sc.edu	Section:	J10/JG1
Office Location:	LeConte 115	CRN:	52998/55077
Office Hours:	Online, Tuesday 12-1, Friday, 12-1		
Credits:	3		

Meeting Information

Location	Day	Time
Online	Mon, Wed, Fri	1:10 - 2:00 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:

1. *Discrete Mathematics and Its Applications, Seventh Edition*, Kenneth H. Rosen, ISBN 0-07-338309-0
A free online version can be found [here](#).
2. *Mathematics: A Discrete Introduction*, Edward Scheinerman, ISBN 978-0840049421
This text will be used for exercises and as a reference for students. Purchase is not necessary, and selections will be provided for students.

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 in this online course. Students are expected to attend every class meeting. Students will be expected to contribute to meaningful discussion during both lecture and group work if applicable. Webcams are not

required for daily class, but they are encouraged. Webcams are **required** for completion of exams.

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 class for the remaining of the meeting time.

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. Homework turned in after 1 week late will receive an automatic 0.

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.

Generative AI: With the rise of the ubiquity of large language model chat bots, tools like ChatGPT, Claude, and others not listed above are unavoidable to mention. The use of these tools is highly not recommended for studying or completing homework. Instead, references such as the textbook and notes from class along with contacting your professor and other tutors is encouraged. Such tools are strictly prohibited during exams, and usage of these tools during exams is deemed equivalent to usage of outside materials and, hence, cheating. You are free to use them, but let this be the last warning: **chat bots can be wrong, they can hallucinate, and they can lie.**

Assignments

Homework: Homework will be assigned weekly on Monday and due the following Monday by the end of the day. Homework will be graded on completion only. Solutions to the homework will also be on the due date.

Exams: There will be three midterm exams and a final exam. The exam will take place during class time. The exam will be proctored by Respondus LockDown Browser to ensure no cheating. The process of completing the exam will be discussed in more detail closer to exam dates. The final exam will be cumulative.

The dates of our midterm exams are as follows: February 13, March 20, and April 17. *The dates of these exams are tentative and can change by no more than a week throughout the semester.*

Evaluation

Final grades in the course will be based on a weighted average of the following five assignment categories. Moreover, the final grade in the course will be assigned on the following letter grade assignments.

Type	Weight
Homework & Participation	15%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Final Exam	25%
Total	100%

Grade	Percentage
A	100-90%
B+	89-87%
B	86-80%
C+	79-77%
C	76-70%
D+	69-67%
D	66-60%
F	59% and below

Support

Office Hours: Past students have found office hours to be 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. 12
MLK Day	Jan. 19
Last day to drop without a “W”	Jan. 20
Spring Break (no classes)	Mar. 8-15
Last day to drop without “WF”	Mar. 30
Last Day of Classes	Apr. 27
Final Exam	May 1

Syllabus is tentative and subject to change.