

# Math 374 Fall 2011

**Instructor:** Kevin Milans ([milans@math.sc.edu](mailto:milans@math.sc.edu))

**Office:** LeConte 314C

**Office Hours:** M 10:00am-11:00am, TuTh 11:00am-12:00pm, and by appointment

**Class Meetings:** TuTh 2:00pm-3:15pm in LC 112

**Webpage:** <http://www.math.sc.edu/~milans/teaching/fa11/math374/>

**Welcome:** Welcome to Math 374: Discrete Structures. I have the highest hopes and expectations for your academic achievement this semester. It is my responsibility to ensure that you have all the tools you need to succeed, including quality instruction and timely feedback. It is your responsibility to use these tools to learn the course material. Hard work and dedication to the course are necessary components of success, but your course grade is ultimately based upon how well you understand the course material as measured by quizzes and tests.

Mathematics can be a difficult subject to learn. It is inherently cumulative: the topic we learn today may (and often is) used throughout the semester and in later courses. Resolve now to learn the material thoroughly. The good news is that you don't have to learn alone. I am more than happy to answer your questions during office hours and via email. You are encouraged to work with other students to master course material.

**Learning Outcomes:** Students will master concepts involving propositional and predicate logic, proof techniques, recursion and recurrence relations, sets, combinatorics, functions, relations, matrices, and trees and graphs.

**Prerequisites:** Grades of C or better in both CSCE146 and Math142.

**Textbook:** *Mathematical Structures for Computer Science*, sixth edition, by Judith L. Gersting; published by W. H. Freeman and Company, New York, NY, 2007.

**Homework:** Homework is assigned regularly. You are strongly encouraged to work on the homework with other students in the class. Homework will not be collected or graded. However, quizzes will often contain variants of problems from relevant homework assignments. It will be very difficult to do well on the quizzes without completing the homework assignments.

**Quizzes:** We will have 6 quizzes. No make-up quizzes are offered. Your lowest quiz score is dropped entirely. Your second lowest quiz score will carry only half the weight of each of your 4 best quizzes. No notes or aids are permitted. Quizzes constitute 20% of your course average.

**Tests:** There will be 3 tests in class. No make-up tests are offered. However, I will replace one of your test scores with your score on the final exam if doing so will help your course average. You may use one 8.5 by 11 inch *handwritten* sheet of notes during each test. No other aids are permitted. Each test covers roughly 1/3 of the course material and constitutes 17% of your course average.

**Final Exam:** The final exam is Wednesday, December 7, 2:00pm-5:00pm. All students must take the final exam during the scheduled exam period. It is not possible to take the final exam at any other time. Students who miss the final exam will receive a score of zero. You may use a graphing calculator without a computer algebra system and one 8.5 by 11 inch *handwritten* sheet of notes during the final. No other aids are permitted. The final exam is cumulative and constitutes 24% of your course average.

**Attendance:** Attendance is expected. Attendance constitutes 5% of your course grade. Failure to take quizzes/tests and failure to collect quizzes/tests when returned is considered evidence of absence. You may miss 3 classes (i.e. 10% of class meetings) without penalty. If you miss 4 or more classes, your attendance grade will be impacted, *regardless of whether or not the absences are excused*; please see the academic bulletin on the university's attendance policy for more information.

**Grading Summary:** Course averages are converted to letter grades according to the scale on the right. The instructor reserves the right to lower these thresholds.

Attendance	5%
Quizzes	20%
Tests	$17\% \cdot 3 = 51\%$
Final Exam	24%
Total	100%

A:	90–100	C:	70-74.9
B+:	85-89.9	D+:	65-69.9
B:	80-84.9	D:	60-64.9
C+:	75-79.9	F:	0-59.9

**Expected Classroom Behavior:** Talking with your neighbors, reading material unrelated to the course, listening to audio entertainment on your headphones, texting, and using a laptop or cell phone are not permitted in class.

**Classroom Participation:** A bonus of up to 3% is possible for excellent classroom participation. The bonus is to be earned cooperatively by all students in the course, and all students receive the same classroom participation bonus. Activities that have a positive effect on the classroom participation bonus include asking and answering mathematical questions. To earn a high classroom participation bonus, a large portion of the class must ask or answer questions occasionally. *Activities that are not permitted in class have a strong negative effect on the classroom participation bonus.* Determination of the classroom participation bonus is entirely at the discretion of the instructor. In general, it is easy to reduce the classroom participation bonus quickly, and increasing the classroom participation bonus requires a prolonged period of good classroom participation. The bonus is typically in the range of 0% to 2%. A bonus of more than 2% is only possible with exceptionally good classroom participation.

**Make-up Policy:** No make-up quizzes or tests will be offered. Since the lowest quiz grade is dropped, you may miss one quiz and still earn full credit in the course. Since up to 1 test score can be replaced by your grade on the final exam, you may miss 1 test and still earn full credit in the course. In exceptional cases, students may be excused from quizzes or tests. The instructor will generally need thorough documentation to excuse you from a quiz or test. Students with valid reasons for missing a test should contact the instructor as soon as possible and appropriate arrangements will be made on a case by case basis.

**Important Dates:** Quiz and test dates are subject to change. Note that October 13 is the *last day to drop classes* without being assigned the withdrawal failure grade “WF”.

- Aug 25: Quiz 1.
- Sep 8: Quiz 2.
- Sep 15: Test 1.
- Sep 29: Quiz 3.
- Oct 13: Quiz 4; Drop deadline.
- Oct 18: Test 2.
- Nov 3: Quiz 5.
- Nov 15: Quiz 6.
- Nov 17: Test 3.
- Dec 7: Final Exam.

**Academic Integrity:** You are expected to practice the highest possible standards of academic integrity. Any deviation from this expectation will, at a minimum, result in an academic penalty of a score of zero on the assignment or test in question. Additional disciplinary measures are likely. For more information, see <http://www.sc.edu/academicintegrity/>.