

Math 5473 - Combinatorics Spring 2019

Instructor: Dr. David Leach
Location: 307 Boyd
Time: MWF 10:00-10:52
Office: 317 Boyd
Phone: (678)-839-4127
Email: cleach@westga.edu
Textbook: *Introductory Combinatorics*, 5th Edition, Richard A. Brualdi.

Learning Outcomes:

1. An understanding of counting problems, permutations, combinations. (L7, L10)
2. A thorough understanding of the Pigeonhole Principle. (L2)
3. An understanding of the Binomial Coefficients. (L5, L10)
4. The ability to use Inclusion-Exclusion in applications (L9, L10)
5. A thorough introduction to the theory of recurrence and generating functions. (L7, L9)
6. An introduction to graph theory. (L7, L10)
7. An understanding of how combinatorial mathematics fits into the Mathematics Georgia Standards of Excellence (GSE) 9-12.

Grading and Evaluation: We will have three tests, a final exam, a number of quizzes and assignments, and a project. The quizzes and assignments will be averaged together into a grade out of 100 points. There will be a total of 450 points available, as shown below. The test dates listed may change, depending on the pace at which we cover the material.

Test 1 (Mon Feb 11):	100 points
Test 2 (Wed Mar 13):	100 points
Test 3 (Mon Apr 22):	100 points
Project (Due Date TBA):	100 points
Quiz/Assignment Average:	100 points
Final Exam :	150 points

Your points will be summed, divided by 6.5, and rounded to the nearest whole number. A letter grade will be assigned according to the standard scale (90-100: A, 80-89: B, 70-79: C, 60-69: D, 0-59: F). Homework will be assigned daily. It will not be graded, but it is vital that you complete the homework. We will have graded assignments and quizzes throughout the semester.

Make-ups: In order to take a make-up test, you must have a valid, documented reason for missing it, and take the make-up within two weekdays of returning to class.

Homework & Assignments: Homework problems will be assigned from each section. It will not be graded, but it is important that you complete it. We will also have several graded assignments throughout the semester. It is also important that you read the textbook.

Late Assignments: Due to abuses in the past, I will only accept one unexcused late assignment from each student throughout the semester. Late assignments will be penalized 10% per class day; no assignment will be accepted more than two class days after the due date.

Other Course Policies: Other course policies, including information regarding students with disabilities and the UWG Honor Code can be found at https://www.westga.edu/academics/assets/docs/Common_Language_for_Course_Syllabi.pdf. You should read this at the beginning of each semester.

Important Dates:

MLK Day:	January 21
Last Day to Withdraw:	February 27
Spring Break:	March 18-22
Math Day:	March 1
Final Exam:	Monday, May 6, 2-4pm