

Syllabus for Math 116: Combinatorics

Spring 2005

Instructor: Jon McCammond

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Course Home Page:

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Text: *Concrete Mathematics: a foundation for computer science* (2nd edition), by R. Graham, D. Knuth, and O. Patashnik, published by Addison-Wesley.

Course description: Elementary counting principles, binomial coefficients, generating functions, recurrence relations, the principle of inclusion and exclusion, distributions and partitions, systems of distinct representatives, applications to computation.

Grading: The plan is to cover selected topics throughout the book at a depth which will vary according to the interests and ability of the class as a whole. Extensive homework assignments will be given and these will be the basis for essentially one-third of your final grade. Because the audience for this particular course is extremely varied with everyone from sophomore to graduate students currently enrolled, I plan on assigning homework exercises at various levels of difficulty so that the more advanced students will have challenging problems to work on. The other two-thirds of the course grade will be determined by a midterm and a final exam. The weights of each of these are as follows.

Homework	30%
Midterm	30%
Final	30%
Participation	10%

The midterm will test the material covered during the first half of the course; the final exam will test the second half.

Make-ups: Make-ups for exams and quizzes will only be given with documented University-approved excuses (see University Regulations).

ADA: Students with disabilities can get assistance from the Office of Services for Students with Disabilities (845-1637). I'm happy to work with them and you.

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