This course gives a broad introduction to combinatorics. The main topics are elementary counting, matchings, inclusion/exclusion, generating functions, the probabilistic method and Ramsey theory. A brief introduction to extremal combinatorics is also given.

- **Web page:** [http://www.math.cmu.edu/~tbohman/21-301/comb.html](http://www.math.cmu.edu/~tbohman/21-301/comb.html)
  Homworks, review sheets, and course announcements will be posted here.
- **Prerequisites:** Calculus (21-122) and Concepts of Mathematics (21-127).
- **Office hours:** Wednesday 10:00-noon or by arrangement. My office is Wean 6204. I can be reached by telephone at 8-8485 or by e-mail at tbohman@moser.math.cmu.edu.
- **Homeworks:** Seven homework assignment will be given during the semester. These will be due on Fridays. Since genuine mathematical understanding is best achieved through the personal exploration of the material that comes with working problems, homeworks are regarded as important. Discussion of the homeworks with other students is permitted, but collaboration on the writing of the assignments is not (i.e. you are NOT permitted to see the actual pages another student is handing in).
  Homeworks will be posted on the web page (but not distributed in class).
- **Tests:** There will be tests on 9/30, 10/28 and 11/18 and a comprehensive final exam. If circumstances such as illness prevent you from taking a test or exam at the scheduled time, please discuss the problem with me before the test or exam if possible.
- **Grades:** The final exam will account for 35% of the course grade. Homework and other relevant information (e.g. class participation) will give 15% of the grade. The remaining 50% of the course grade will be given by the average of your best two test scores. The lowest test grade will be dropped.