9-2013

M 581.01: Combinatorics

Cory T. Palmer
University of Montana - Missoula, cory.palmer@umontana.edu

M 581. Combinatorics. Autumn 2013.

Instructor: Cory Palmer
Office: 004E Math
E-mail: cory.palmer@umontana.edu
Office hours: TBA

- **Course description:** This course will be a graduate-level introduction and survey of combinatorics. Topics will include counting, recurrence relations, generating functions, Ramsey theory, extremal problems as well as some standard combinatorial methods (e.g. linear algebra and the probabilistic method).

- **Textbook:** *Combinatorial Mathematics* by Douglas B. West (Fall 2013 edition). We will cover Chapters 1-4 and selected topics from chapters 10-16 as time permits.

- **Class schedule:** MWF 2:10-3:00 PM in MATH 211

- **Homework:** Homework will be assigned (roughly) every other and will be due in class. You may work in groups on the homework, but be sure to write up your own answers. Late homework will not be accepted. As a courtesy for unforeseen circumstances one homework grade will be dropped. Homework missed due to illness, etc (with proper documentation) will also be dropped. Homework will be graded both on correctness and clearness of arguments. Work that is too difficult to read may be marked off.

- **Practice problems:** Practice problems will be posted to supplement the homework. These will not be collected but will help your understanding of the material.

- **Presentation:** Each presentation will consist of a 50-minute lecture on a topic relevant to the course (either from our book or a related paper). Students should talk to me about potential topics and eventually prepare a 1-page typed summary of their lecture (with references) before giving the lecture.

- **Grading:** Your grade will be composed of: 70% homework, 30% in-class presentation. Letter grades and +/-s will be assigned according to the standard scale.

- **Class website:** The class website will include class announcements, homework assignments, readings, and a brief description of the topics covered in each lecture. Check it regularly!
http://cas.umt.edu/math/People/Palmer.html

- **Accommodations:** If you are entitled to accommodations sanctioned by DSS, you should notify me soon so we can make appropriate adjustments.