Lecture overview

Everything is on Canvas

- http://canvas.sfu.ca

Instructurs

- Matt DeVos (teacher) - Lectures, Exams
- Justin Gray (workshop coordinator) - Workshop, Assignments, Quizzes

Resources

- Book: *Discrete and Combinatorial Mathematics: An applied Introduction* by R.P. Grimaldi
- Algebra Workshop: in AQ4135. Use for assistance with problems and questions related to the course
- Your Classmates - It is highly encouraged that you work in groups

Topics you should know

- Counting (section 1.1)
- Logic (chapter 2)
- Set Theory (sections 3.1, 3.2, 3.3)
- Induction and Number Theory (chapter 4)
- Relations and Functions (chapter 5)

Combinatorial Objects in MACM 201

- Sets and subsets
- Strings and permutations
- Graph
- Trees

Topics in MACM 201

- Counting - inclusion exclusion (chapter 8), generating functions (chapter 9), recurrence relations (chapter 10)
- Graph Theory - graph basics (chapter 11), trees (chapter 12), optimization (chapter 13)

Grading: assignments, quizzes and exams

Grading scheme:

1. Ten in-class quizzes (best 8 out of 10): 10%
2. Midterm 1 (Wed. Oct. 3): 20%
3. Midterm 2 (Wed. Nov. 7): 20%
4. Final Exam (Thur. Dec. 6): 50%

Quizzes

- Take place on Wednesday during the last 10 minutes of class.
- Each quiz will be two questions.
- Both questions on the quiz will be closely related to the corresponding weekly assignment.
- Quizzes cannot be retaken.

Missed quiz/exam due to illness

- The quiz grading scheme is designed to allow you to miss two quizzes without it affecting your grade. Accordingly, we will not be accepting sickness as an excuse for a missed quiz except in exceptional circumstances.
- If you cannot attend a midterm due to sickness, you will need to provide appropriate documentation. There is no make-up midterm, in this case we will alter the grading scheme for you so that the final is worth 70% to account for the missed 20%.

Special accommodation

Students requesting special accommodation (religious, athletic competitions, CSD, etc) must tell the instructor by the end of the first week of term.

Communication

Canvas:

- Announcements (broadcast messages to the class)
- Discussions (an open forum to discuss course related questions)
- Conversations (personal communications)

Email: Due to the massive size of this class it is very difficult for me and the Workshop Coordinator to reply to student emails. In particular, you should **not** email a question about the course that can be answered by looking at the documentation on Canvas.

- **email me:** concerning exceptional medical or family issues causing a missed midterm (or many missed quizzes)
- **email Justin Gray:** questions concerning quiz grading

Academic Honesty

Simon Fraser University values a high standard of academic excellence and integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offenses under the Code of Student Conduct and Disciplinary Procedures (see http://www.sfu.ca/policies/teach

Cheating has no place in university and we take occurrences of it very seriously. Cheating includes, but is not limited to:

- Using calculators during quizzes or exams.
- Looking at the work of other students during quizzes or exams.
- Using reference materials during quizzes or exams that are not explicitly distributed for that purpose.

In all these cases, the minimum penalty is that you will receive a failing grade (i.e. no credit) for the work (the assignment, midterm, final). Stronger action may also be taken according to the severity of the offense, including: referring the matter to the Chair of Department; placing a permanent note in you academic file; assigning an FD (Failed - Academic Dishonesty) grade. The FD grade is a permanent mark on a transcript that informs future employers of a students academic dishonesty (see policy S10.02 on Principles and Procedures for Student Discipline).

Keys to success in MACM 201

1. Prepare (15-30 min), attend (1h), and review (30 min) the weekly lectures
2. Do the homework!!! (3h)
3. Work regularly (around 9h/week including lectures)
4. Try to **understand** what is going on, not just memorize it.
5. Collect your homework in a journal.
6. Use the Algebra Workshop
7. Work in groups!