1. MATH 413 - INTRODUCTION TO COMBINATORICS, SPRING 2023

Class time and location: MWF 1:00 PM - 1:50 PM, 156 - Henry Administration Bldg

Instructor: Peter Bradshaw, pabradsh@sfu.ca

Web page: peter-bradshaw.com/413

Office Hours: By appointment; I will usually be in my office (CAB 70) after class.

Textbook: Brualdi, *Introductory Combinatorics*, 5th ed. (The 4th edition should be fine.)

Scope of class: Chapters 1-8 of Brualdi, and special topics as time permits.

Point distribution:
- Weekly assignments: 15%
- Three midterms: 15%+15%+15%
- Final exam: 40%

Grade thresholds:
- 85% guarantees an A- or above.
- 70% guarantees a B- or above.
- 60% guarantees a C- or above.
- 50% guarantees a D- or above.

Grading criteria: All solutions on exams and homework assignments should have a reasonable amount of explanation, and solutions with no explanation may not be worth any points. One important goal of this class is to strengthen the ability to write coherent proofs and logical arguments, and therefore a correct method presented in an unclear way may not be worth full credit. Spelling and grammar mistakes will not be penalized unless they interfere with a reader's ability to understand a solution.

Homework: Homework assignments are due on paper at the beginning of class on their due dates. Each assignment is worth 20 points, and 2 points will be added for assignments that are typed in LaTeX. Figures do not need to be typed.

I encourage group work on assignments, but all solutions submitted for a grade must be written individually, with no exceptions. All collaboration must be acknowledged with a statement such as *"I worked on Problem 1 with XYZ and received a hint on Problem 2 from ABC."* These statements will never incur a penalty, but failure to include them may be treated as academic dishonesty or plagiarism.

Any use of materials apart from the main textbook must be acknowledged with a similar statement, such as *"I found a key idea for the proof of Problem 1 on StackExchange."* Even when external sources are consulted, all solutions submitted for a grade must be written individually. Again, these statements will never incur a penalty, but failure to include them may be treated as academic dishonesty or plagiarism.

Accommodations: If you require any accommodations, please let me know within a week of the first class.

Makeup policy: Any missed midterm exams will be dropped, and the final exam will be re-weighted accordingly, provided that you have evidence of a medical reason preventing you from taking the exam. If a medical concern prevents you from taking the final exam at the scheduled time, a makeup exam will be offered.

Exam dates: TBD