MATHEMATICAL PROOF, MATH 220

1. General Information

- Course: Math 220, Winter Term 2, Jan-April 2019.
- Course website: `http://www.math.ubc.ca/~ollivier/Math220-2019.html`
- Text: Book of Proof (2nd or 3rd edition), by R. Hammack. You may purchase a physical copy of this book at the bookstore, or you may access and download the book for free at the `http://www.people.vcu.edu/~rhammack/BookOfProof/`. The sections we will cover are listed below.

2. Syllabus (subject to later adjustments)

The numbers of the sections refer to the 3rd edition namely the online version of the book. If you own a physical copy of the 2nd edition, you'll see that there are only some minor changes.

- Sets and basic definitions: 1.1
- Logic: 2.1, 2.2, 2.3
- Proofs: 4.1 to 4.5
- Logic: 2.4, 2.5, 2.6
- Contrapositive Proof: 5.1, 5.2, 5.3
- Logic: 2.7, 2.8, 2.10
- Proving non-conditional statements: 7.1 to 7.4
- Disproof: 9.1, 9.2, 9.3
- Mathematical Induction: 10.1 and 10.3
- Sets: 1.3, 1.4, 1.5, 1.6, 1.7
- Proofs involving sets: 8.1, 8.2, 8.3
- Sets: 1.2
- Relations: 11.1 to 11.5
- Functions: Chapter 12
- Proof by contradiction: Chapter 6
- Counting: Chapter 14 (in the third edition online. It was chapter 13 in the previous edition).