

## MATHEMATICAL PROOF, MATH 220

### 1. GENERAL INFORMATION

- Course: Math 220, Winter Term 2, Jan-April 2025.
- Rachel Ollivier (203, 204, IIC) Dragos Ghioca (20M)
- Hours and location: see information posted on Canvas.
- Text PLP: An introduction to mathematical proof by S. Demirbas and A. Reznitzer.  
<https://personal.math.ubc.ca/~andrewr/PLP/>

### 2. SYLLABUS

Sets and basic definitions: PLP 1

Logic, truth tables etc: PLP 2

Direct Proofs: PLP 3

Contrapositive Proof: PLP 5

Logic, quantifiers, negation, disproof, existence proof (brief discussion) PLP 6

Induction PLP 7

Sets PLP 8

Relations PLP 9

Functions PLP 10

Proof by contradiction PLP 11

### 3. HOMEWORK

The weekly homework is posted on Canvas

### 4. MIDTERMS

The two midterms dates are posted on Canvas

### 5. GRADES

Your final grade will be computed as the maximum of the following:

Homework 20%, Midterms 15%+15%, Final exam 50% or

Homework 20%, Best midterm score 20%, Final exam 60%.

The grades of those students who miss a midterm will be computed by the second method.