

# Math 4161 (Winter 2021) Course Outline

## Course description

This course is an introduction to mathematical cryptography, with a focus on public-key cryptography based on number theory. This course is almost entirely theorems and proofs. You will need to be able to construct a mathematical proof, including basic types of arguments that you might use (induction, proof by contradiction, contrapositive, etc.).

## Information

Instructor: Jorge Mello Email: [jmelloguitar@gmail.com](mailto:jmelloguitar@gmail.com)

Lectures schedule on Zoom: Tues, Thurs 10:00 - 11:20

Zoom Office Hours: Tues, Thurs 1:00 - 1:50pm

## Grading

20% Regular homework assignments

30% Mid-term test 50% Final exam

## Access/Disability

Students with health-related, learning, physical, psychiatric, or sensory disabilities who require reasonable accommodations in teaching style or evaluation methods should discuss their concerns with the course instructor as soon as possible so that appropriate arrangements can be made.

## Course textbook

*An Introduction to Mathematical Cryptography (Undergraduate Texts in Mathematics)*

2nd edition, by J. Hoffstein, J. Pipher, and J.H. Silverman