

MAT 200: Logic, Language & Proofs

Summer 2020 (May 26 - July 3)

Instructor Information

Instructor Name: Prithviraj Chowdhury

Office Hours: Tuesday 12:30-1:30PM EST

Class Timings: Tuesday & Thursday 1:30-4:55PM EST

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Course Description

This course aims to introduce students to two things: a) mathematical reasoning, and b) writing proofs. We will first discuss logical language, operations, and methods of proofs in general. We will then study set theory and functions. After this, we will move on to the topic of cardinality. The remainder of the course will deal with selected topics in elementary number theory. Classes will meet online (on Zoom) twice a week at the times specified above. At the end of this course, students should have a better foundation to proceed to upper division courses.

Required Materials

Peter J. Eccles, *An Introduction to Mathematical Reasoning: Numbers, Sets and Functions*, Cambridge University Press (2012) | ISBN 978-0-521-59718-0 | **Note:** We will cover the first five chapters of this textbook. Students may purchase the book from Amazon, AbeBooks, or use e-book editions.

Assessments:

- 40% Homework
- 15% Participation in Class

- 20% Midterm
- 25% Final Exam

Course Policies

Late Assignments

Late assignments will be accepted for no penalty only if a valid excuse is communicated to the instructor before the deadline.

Disability Support Services (DSS) Statement

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC(Educational Communications Center) Building, Room 128, (631)632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. <http://studentaffairs.stonybrook.edu/dss/>

Academic Integrity Statement

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Disclaimer

Please note that the schedule and syllabus are subject to change during the session so as to accommodate and support different learning outcomes/requirements. The most up to date version of the syllabus will be made available via Blackboard.