

**Syllabus for MAT 200
Logic, Language and Proof
Summer 2016**

Description:

Lecture time: TuTh 1:30PM - 4:55PM, Library W4530
Lecturer: Yuhan Sun
Office: Physics D-107
Email: yuhansun@math.stonybrook.edu
MLC Hours: Wes 4-6pm
Office Hour: Wes 3-4pm

Text: *An Introduction to Mathematical Reasoning*, Peter J. Eccles.

Material to be Covered: Roughly we will cover the first five parts of the book, homework will be assigned weekly and we will have two midterms and a final. No late homework will be accepted. Discussion with others is allowed but write down your own solution.

Schedule: Midterm 1: June 9th. Midterm 2: June 23rd. Final exam: July 7th.

Expectations: The goal of the course is to introduce the student to logical reasoning and proofs. This course serves as an introduction to rigorous mathematics used in upper-division mathematics courses. We will first discuss logical language and operations, and methods of proof in general. We will then focus on sets and maps between them the foundational objects of mathematics. Finally, we study cardinality. We will apply the rigorous language to systematically define and study some notions of number theory, elementary analysis, and Euclidean geometry.

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 (631) 632-6748 or <http://studentaffairs.stonybrook.edu/dss/>. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: <http://www.stonybrook.edu/ehs/fire/disabilities/asp>.

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