

School of Arts & Sciences Prospectus Fall 2024

Course ID and 7-digit Number: PHIL 4721/PHIL 6721/MATH 5700/LGIC 3100

This course will introduce the main ideas of mathematical logic, including proofs of the Completeness, Compactness, and First Incompleteness Theorems. Additional topics in logic will be covered based on class interest.

Class Structure for TERM YEAR

Students will read sections of the textbook introducing definitions and main ideas before class. Class time will be used to discuss the more difficult points and round out the topic with examination of examples, motivation, and some history.

Outline of Assignments & Assessments

Grades will be based on homework (70%) and a final exam (30%). The homework will amount to roughly two proofs per week; the homework portion of the grade will be based on how many problems are turned in, in a complete, correct, well-written form, by the end of the semester. There will be weekly opportunities to turn in proofs to get confirmation that they're complete or feedback about how to improve them.

Essential Course Policies

The course textbook is Modern Mathematical Logic by Joseph Miletì.