

# MAT 309: Introduction to Mathematical Logic, Fall 2019

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*Please use email for personal matters only (include “MAT309” in the subject); post all other questions and comments in the course forum.*

**Textbook** “A Friendly Introduction to Mathematical Logic” (2nd Edition)  
by Christopher C. Leary and Lars Kristiansen

*Available online and at the UofT bookstore for \$45.00.*

**Course description** This course will cover chapters 1-6 and parts of chapters 7-8 of the textbook. Topics include: first-order logic, the relationship between truth and provability, soundness and completeness theorems, Gödel’s Incompleteness Theorem, and an introduction to computability theory. Time permitting we will explore additional topics, such as the theory of real-closed fields and the zero-one law for random graphs.

**Course website** <http://www.math.toronto.edu/rossman/MAT309.html>

*Check the course website for the textbook sections to be covered in each lecture (required reading!)*

**Forum** <https://piazza.com/utoronto.ca/fall2019/mat309h1>

*For all questions and comments related to the course material.*

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**Lectures** Tuesday 2-4 and Thursday 3-4 in MP 203

**Tutorials** Friday 10-11 in BA 1200  
Friday 11-12 in BA 1200  
Friday 3-4 in HA 403  
Friday 4-5 in HA 401

**Office hours** Tuesday 12-1 in BA 6214

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| <b>Grading Scheme</b><br><i>Updated Oct 24</i> | 5%  | Problem Set 1                                    |
|  | 5%  | Problem Set 2                                    |
|  | 8%  | Problem Set 3                                    |
|  | 12% | Problem Set 4                                    |
|  | 20% | Midterm exam (took place in class on October 10) |
|  | 50% | Final exam                                       |

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| <b>Original Scheme</b> | 15% | Homework assignments (four problem sets) |
|                        | 20% | Term test 1 (in class on October 10)     |
|                        | 20% | Term test 2 (in class on November 14)    |
|                        | 45% | Final exam                               |

The term test will take place during class hours in the usual classroom (MP 203). If you must miss an exam due to medical reasons, you must inform the instructor by email in advance (or as soon as possible) and present a doctor's note in accordance with UofT policy.

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**Homework policy** Homework assignments will be due *in class* on the designated due date. Late submissions will not be accepted. Each assignment will be graded based on an undisclosed few problems. Students are encouraged to work alone; collaboration is permitted, but make certain to include the name of anyone you work with.