# Maths 445: Elementary Logic Fall 2025

#### **Instructor Information**

*Name:* Aristomenis-Dionysios<sup>1</sup> Papadopoulos (he/him).

Office: 4311

*Email:* aris@umd.edu – Include Maths 445 in the subject line!<sup>2</sup> *Office Hours:* TBD. Also, by appointment (available on Zoom too).

Website: https://arispapadopoulos.github.io/

#### **Class Information**

Dates: MonWedFri Time: 1:00-1:50 Classroom: JMP 1109

### **Course Description**

This course is an introduction to mathematical logic. The topics discussed include naive set theory, propositional and first-order logic, recursion theory, and Gödel's first incompleteness theorem.

# Textbook, Calculators, & Software

We will follow my notes, which will be updated throughout the term, on https://arispapadopoulos.github.io/teaching/445.html

#### **Phone and Device Policies**

You're all adults; if you'd rather spend your time in class on your phones, that's fine by me. All I ask is that you please don't distract other students when using electronics in the classroom.

Phones and other electronic devices will not be allowed during the exam.

#### Grading

Your final grade will be determined as follows:

- 20% Homework: You will be given a number of problem sheets in the term,<sup>3</sup> roughly one every week.
- 80% Final exam.

Plus/minus grading will be implemented in this course. The final letter-grade cutoffs will be decided at the end of the semester. If you want to have some sort of scale in mind, here's the standard one:

A	93 – 100	C+	77 – 79
A-	90 – 92	С	73 – 76
B+	87 – 89	C-	70 – 72
В	83 – 86	D	60 – 69
В-	80 – 82	F	0 – 59

<sup>&</sup>lt;sup>1</sup>I don't like titles and/or formalities, and my name has too many letters, so just call me Aris ("R-iss" or "Air-iss").

<sup>&</sup>lt;sup>2</sup>In general, I do my best to reply to emails within 24h, but sometimes emails do get lost. If I haven't replied to your email within two days, it probably got pushed down in my inbox, so please let me know in class!

<sup>&</sup>lt;sup>3</sup>I will not be using WebAssign.

#### More on Homework

You are strongly encouraged to collaborate with your colleagues on the homework problems, but each student should submit their own solutions.

#### More on Exams

There will be a single final exam, which will be "open-note". You will be allowed to bring with you two A4 sheets with whatever notes you feel like.

The uniform final exam will be on Tuesday, December 16, 4pm - 6pm

## **Academic Dishonesty**

See this page for the University's policy on academic integrity.

#### Extra Resources

Some useful resources are listed below:

- Maths Department tutoring hours can be found here.
- The Maths Success Program can be found here.
- Old exams can be found here.
- Other services can be found here.

Finally, the internet is a wild place, and believe it or not, not everything on the internet is true. That being said, places like mathstackexchange were useful to me when I was an undergrad.<sup>4</sup>

# **Accessibility and Disability Services**

More information can be found here. I aim to make the course as accessible as possible, so please make sure to request accommodations by registering with Accessibility and Disability Services and I will do my best to support you. Students who require classroom accommodations or other arrangements must make this known to me as soon as possible at the beginning of the semester. Students must make accommodated testing reservations at least one week before the test date.

#### Other Important University Resources/Policies

Your mental health is extremely important, and I am committed to making our class a safe and welcoming place for **all** students.

- If you need support, the Counselling Centre can be found here.
- The Office of Civil Rights and Sexual Misconduct can be found here.
- Student Rights and Responsibilities can be found here.
- Course-Related Policies and Resources for Undergraduate Students can be found here.

<sup>&</sup>lt;sup>4</sup>If you use mathstachexchange, or any other source in your homeworks, make sure to cite it!