Phil 203: Elementary Formal Logic
Syllabus

Course Information:

Instructor: Dr. Audrey Yap (ayap@uvic.ca)
Class Schedule: TWF 11:30-12:20 in DTB A110
Office Hours: Th 9:00am–11:00am on Zoom (sign up required)

Course Website: Through Brightspace (https://bright.uvic.ca/d2l/home)
Textbook: Abridged Version of http://forallx.openlogicproject.org/ PDF copy available through the course website. We will also use free web-based software at https://carnap.io/.

Course Description:

This is an introductory course in formal logic that covers the use of symbolic techniques for the analysis and construction of good arguments. Proofs in formal logic mirror the structure of good arguments in English generally, so to construct them, we learn about good methods of inference. Not every method of reasoning results in a valid argument, so it is useful to learn about ways of differentiating good from bad methods. Since this course covers the basics of modern symbolic logic, it is extremely useful for any students who might want to continue studying logic; but any students interested in writing better arguments can benefit from it.

Learning Objectives:

You will learn the basic terminology and concepts of formal logic, and apply them to the formal languages we will learn using truth-functional connectives and quantifiers. The main skills you will learn will be:

- symbolizing English sentences in a formal language,
- using truth tables for evaluating sentences and arguments, and
- constructing logical proofs using a formal system.

Course Logistics:

Class Meetings: There will be three class meetings per week, and each week will follow a standard pattern:

- Tuesdays: In-person lecture about the week's material. Slides will be posted on the course website and these sessions will be recorded.

- Wednesdays: Class time will be used for you to work through the course modules with my help. These are online worksheets that supplement the lecture material so you can learn how to apply the concepts we covered in lecture.
- Fridays: Class time will be used for you to work through practice problems with my help. These will be questions similar to those you will be answering in the weekly quizzes, so they'll prepare you for doing the quizzes on your own.

I do not take attendance, so if you ever need to miss class, all you will need to do is catch up on the scheduled material on your own time. All important announcements will be posted to the course website. All material will also be turned in online. This means that there are no specific sessions that you need to attend, so long as you are keeping up with the work.

But in my experience, you don't learn very much logic just by listening to someone talk about it! This is a class where working through problems and trying things out is crucial. That's why so many of the class sessions are devoted to doing just that, but where you can just ask me or your TAs about anything you're having trouble doing or understanding.

Textbook: There is nothing you have to purchase for this course. The textbook is available on the course website as a downloadable PDF file. Weekly quizzes and tests will be posted on the course website, and will be completed using a system called `http://carnap.io/`. This will not require you to download any software, but you will need to be connected to the internet to complete and turn in your gradeable work.

Communication: Email is my preferred method of communication, especially for any official requests. If you ask me a question over email, you can expect a reply within about 1 working day. If you don't hear back from me after that time frame, feel free to try again in case your message went astray. When you do address me (over email or otherwise), please do so as either Professor (Prof.) Yap, Dr. Yap, or Audrey. Please don't use any of Mrs/Miss/Ms/Mr, for a variety of reasons. If you are ever nervous about sending me an email, or asking a question, feel free to include a picture of a puppy with your request. This will not affect whether or not I will be able to help you with your request, but will give you an excuse to look for pictures of puppies. Finally, my pronouns are she or they. If you think I am unlikely to know the name you would prefer to be called, or the pronouns I ought to use for you through the entry that I will see for you through Brightspace, please don't hesitate to make me aware.

Graded Items: In order to supplement my practice questions, and the ones from the book, you will also be generating practice questions for each other. You can receive up to 8 marks for engagement by posting original (not duplicates of textbook questions or those in the practice assignments) practice questions and solutions for your classmates on the course discussion forums. Guidelines for the questions and solutions will be posted for each forum. These will be graded on a credit/no credit basis, and any submission that meets the

guidelines will receive credit. At the end of each week, there will also be either a quiz on the week's material (4% × 8 total) or a unit test (15% × 4 total) covering the last several weeks of material. These will be completed on carnap.io, and are untimed, which means that they only need to be turned in by the due date. Quizzes and tests will be released on Friday mornings and will be due by 11:59pm on Sunday.

Office Hours: I will be available for office hours on Thursday mornings. My default platform for office hours will be Zoom, but if that does not work for you, please feel free to email me in advance to suggest an alternative. You will need to schedule an appointment beforehand using the following link: `https://calendly.com/ayap/office`. Appointments can be scheduled in 15 minute blocks, up to a week in advance. If you are working with a study group and would like to attend office hours as a group, simply designate one person to reserve the appointment slot, and let me know who else will be attending.

Academic Integrity: You are welcome and encouraged to discuss course material with others in your class, and work through modules and practice questions together. However, you are not allowed to provide the solutions for someone else's quizzes or tests, or vice versa. If you are ever unsure about what constitutes a violation of academic integrity, more information is provided on the University Calendar: `https://bit.ly/3RWlz3Q`.

Extensions: I know that sometimes things do not go as planned. You are welcome to two days' worth of extensions on quizzes or tests. This means you can take two extra days to complete a single assignment, or have one extra day on two different assignments. Please let me know before the due date if you are using an extension. You also do not need to tell me why you need the extension, but if you anticipate needing more than these two days during the semester, I highly encourage you to make an appointment with me to talk about how we can plan for you to keep up with the course schedule. No extensions will be given on engagement points, since they are for the benefit of the other students in the class. However, you will only need to post 8 during the semester, so missing one or two weeks will not be a problem.

Grading Breakdown:

Gradable Item	**Description**	**Value**		
Engagement	Posting practice questions on the course discussion boards.	1% x 8 weeks	=	8%
Quizzes	Questions about the week's material	4% x 8 quizzes	=	32%
Unit Tests	Non-cumulative tests on material from the whole unit.	15% x 4 tests	=	60%
		Total	=	100%

Accessibility:

If you notice any additional accessibility issues with respect to this class, please let me know and I will do my best to solve them. I would also encourage any students who might benefit from their services to register with the Centre for Accessible Learning (`https://www.uvic.ca/services/cal/`).

Numerical and Letter Grades:

Grades will be given as percentile marks. The percentile mark for the course will be converted to a letter grade in the following manner:
A+ = 90 - 100, A = 85 - 89, A- = 80 - 84, B+ = 77 - 79, B = 73 - 76, B- = 70 - 72, C+ = 65 - 69, C = 60 - 64, D = 50 - 59, F = 0 - 49. The A range means exceptional, outstanding and excellent performance. A grade in the B range means a very good, good and solid performance. A grade in the C+ or C range means satisfactory, or minimally satisfactory, performance. A grade of D indicates merely passable or marginal performance. An F indicates unsatisfactory performance.

Schedule of Topics:

- Week One: Short week — Sep 6–10

  Topic: Introduction to Arguments and Formal Logic (Chap 1-2)

- Week Two: Sep 11–17

  Topic: Symbolizing English (Chap 4-6)
  Practice Questions posted by Sep 14
  Quiz One completed by Sep 17

- Week Three: Sep 18–24

  Topic: Introduction to Truth Tables (Chap 8-10)
  Practice Questions posted by Sep 21
  Quiz Two completed by Sep 24

- Week Four: Sep 25–Oct 1

  Topic: Truth Tables, Continued (Chap 11-13)
  Practice Questions posted by Sep 28
  Test One (Symbolization and Truth Tables) completed by Oct 1

- Week Five: Oct 2–8

  Topic: Natural Deduction (Chap 14-15)
  Practice Questions posted by Oct 5
  Quiz Three completed by Oct 8

- Week Six: Oct 9–15 (Oct 9 is a holiday)

  Topic: Natural Deduction (Chap 15-16)
  Practice Questions posted by Oct 12
  Quiz Four completed by Oct 15

- Week Seven: Oct 16–22

  Topic: Natural Deduction (Chap 16)
  Practice Questions posted by Oct 19
  Test Two (Natural Deduction) completed by Oct 22

- Week Eight: Oct 23–29

  Topic: Introduction to First-Order Logic (Chap 21-22)
  Practice Questions posted by Oct 27
  Quiz Five completed by Oct 29

- Week Nine: Oct 30–Nov 5

  Topic: More Complex Symbolization (Chap 23-24)
  Practice Questions posted by Nov 2
  Quiz Six completed by Nov 5

- Week Ten: Nov 6-12

  Topic: Natural Deduction for FOL (Chap 32-33)
  Practice Questions posted by Nov 9
  Test Three completed by Nov 12

- Week Eleven: Nov 13–19 (Reading Break is Nov 13–15) Topic: Natural Deduction for FOL continued from last week
  Quiz Seven completed by Nov 19

- Week Twelve: Nov 20-26

  Topic: Natural Deduction for FOL (Chap 34-36)
  Practice Questions posted by Nov 23
  Quiz Eight completed by Nov 26

- Week Thirteen: Nov 27-Dec 3

  Topic: Natural Deduction for FOL (Review)
  Practice Questions posted by Dec 1
  Test Four completed by Dec 4