Phil 371: Non-Classical Logics
Syllabus

Instructor: Dr. Audrey Yap (`ayap@uvic.ca`)
Office: CLE B307
Office Hours: TWF 11:30-12:20, and by appointment.
Tutorial Hours: TBA.
Class Information: TWF 1:30-2:20 in COR B143.
Course Website: Through CourseSpaces. `http://coursespaces.uvic.ca`
Textbook: Graham Priest, *An Introduction to Non-Classical Logic*.
Readings from the textbook will frequently be supplemented by notes on CourseSpaces. However, if you notice any accessibility issues with respect to the readings or course website, please let me know.
Prerequisites: Phil 203, Math 122, or permission of the instructor.

Course Outline: This is an intermediate-level course in symbolic logic that covers the basics as well as some of the metatheory of various non-classical logics. Non-classical logics have historically been developed to model features of language or reasoning that are absent from classical propositional or first-order logic. Some of them are compatible with classical reasoning, while others are not. Students will also work on writing clear informal (natural language) proofs *about* logical systems, as well as proofs within them.

Communication: Office hours are held on a drop-in basis. You do not need to make an appointment to see me during those times, although the amount of time I can spend talking to any one person during office hours can depend on how many people are waiting. If you do want to schedule an appointment outside my office hours, try emailing me with a few suggestions for times that would work for you. I'm also happy to try and answer short questions either before or after class, time permitting. In general, 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, or Dr. Yap. 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/hers. 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 CourseSpaces/UVic registration, please don't hesitate to make me aware.

Course Logistics: This course typically requires regular attendance, and almost all students find it useful to attend at least one of the designated drop-in sessions. These are

held every week in which an assignment is due and will give you the chance to work on the assignments in groups with instructor feedback. There will be 9 homework assignments which must be turned in by class time on the due date unless otherwise specified. Assignments will generally be due on Fridays, but any one assignment can be turned in late (the following Monday) without penalty, so long as you email me and ask for an extension before the class when it is due. Documentation is only required if you need an extension on more than one assignment without penalty. Otherwise, a second late assignment will lose 2 points per day and will not be accepted more than 5 days after the due date. Note that while I encourage you to work on your assignments in groups, you must write up your answers independently. Plagiarised work will not receive credit. For more information on plagiarism and academic integrity, see the University Calendar (`https://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html`).

Homework is worth 25% of the final grade. There will also be two non-cumulative tests (20% each) and a cumulative final to be held during the final examination period to be scheduled by the Registrar (35%). Exam rewrites will only be scheduled in cases of documented illness or other extenuating circumstances. Documentation must be received within a week of the exam date.

Numerical and Letter Grades: Grades will be given as percentile marks. Work will be evaluated on both its clarity and its correctness. 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 or D- indicates merely passable or marginal performance. An F indicates unsatisfactory performance.

Schedule:

- Week One: Jan 8, 9, 11

  Topic: Logical Basics
  Reading: Chap 0

- Week Two: Jan 15, 16, 18

  Topic: Propositional Logic
  Reading: Chap 1
  HW 1 due Jan 18

- Week Three: Jan 22, 23, 25

  Topic: Introduction to Modal Logic
  Reading: Chap 2
  HW 2 due Jan 25

- Week Four: Jan 29, 30, Feb 1

  Topic: Systems of Modal Logic
  Reading: Chap 3
  Test One: Feb 1

- Week Five: Feb 5, 6, 8

  Topic: Systems of Modal Logic, continued
  Reading: Chap 4
  HW 3 due Feb 8

- Week Six: Feb 12, 13, 15

  Topic: Conditionals and Conditional Logics
  Reading: Chap 1 (1.6-1.10), Chap 5
  HW 4 due Feb 15

- Reading Break!

- Week Seven: Feb 26, 27, Mar 1

  Topic: Intuitionistic Logic.
  Reading: Chap 6
  HW 5 due Mar 1

- Week Eight: Mar 5, 6, 8

  Topic: Many-Valued Logics
  Reading: Chap 7
  HW 6 due Mar 8

- Week Nine: Mar 12, 13, 15

  Topic: First Degree Entailment (FDE)
  Reading: Chap 8
  Test Two: Mar 15

- Week Ten: Mar 19, 20, 22

  Topic: Many-Valued Modal Logics
  Reading: Chap 9
  HW 7 due Mar 22

- Week Eleven: Mar 26, 27, 29

  Topic: Relevant Logics
  Reading: Chap 10
  HW 8 due Mar 29

- Week Twelve: Apr 2, 3, 5

  Topic: Review
  HW 9 due Apr 5

Note: This syllabus is tentative, and should only be used to give a rough guide to the course schedule. Additional readings may be assigned, and dates may be changed if necessary.