

SCHOOL OF HISTORY, PHILOSOPHY, POLITICAL SCIENCE AND INTERNATIONAL RELATIONS

PHILOSOPHY

PHIL421 Formal Logic

TRIMESTER 1 2011

28 February to 2 July 2011

Trimester dates

Teaching dates: 28 February to 3 June 2011

Mid-trimester/Christmas break: 18 April to 1 May 2011

Study week: 6-10 June 2011

Examination/Assessment period: 10 June to 2 July 2011

Note: Students who enroll in courses with examinations must be able to attend an examination at the

University at any time during the scheduled examination period.

Withdrawal dates

Information on withdrawals and refunds may be found at:

http://www.victoria.ac.nz/home/admisenrol/payments/withdrawlsrefunds.aspx

Names and contact details

Ed Mares

Murphy MY618 Phone: 04 4635234

Email: <u>Edwin.Mares@vuw.ac.nz</u> Office Hours: Tuesday 2-3pm

Class times and locations

Time: Monday 9-11am Room: Murphy MY617

Course delivery

The course will be delivered in lectures. Students are encouraged to ask questions or make comments, as in all Honours Philosophy courses. A set of notes will be made available to students on Blackboard.

Communication of additional information

All additional information will be announced in lectures and made available on Blackboard.

Course content

This course will be an introduction to standard model and proof theory.

This is a course on substructural logic. Students in this course will learn a variety of different types of proof theory for these systems and learn how to use each of them to prove theorems (or "sequents") of the systems. Students will also learn several key metatheorems and how to prove them. In particular we will investigate the relationships between the proof theories and prove that they are equivalent to one another in terms of what they can prove. We will also show a simple cut-elimination theorem for certain of these systems.

Learning objectives

Students passing this course will learn methods in this course that they can apply well beyond the subject matter of the course. They will be able to reason about formal systems using the techniques of modern proof theory. This will give them insight about the nature of mathematical proof. They will also learn about the diversity of formal reasoning methods.

Graduate Attributes

As with all PHIL courses, learning objectives of this course contribute to the attainment of specific attributes in the areas of logical and critical thinking and conceptual analysis. For more details please consult our website www.victoria.ac.nz/hppi/subjects/phil.aspx#grad-attributes

Expected workload

University guidelines specify a rough equivalence of 10 hours of work for each point that a course is worth. PHIL421 is a 15 point course, so an overall workload should be approximately 150 hours for the trimester. This may vary depending on the student. The number of hours per week will vary. There will be weekly homework that will not be graded, but students should expect to spend more time on this course in the week before the test and before the exam as well as in the weeks before the due date for the assignment.

Readings

Essential texts:

The readings will be posted on Blackboard or given directly to students.

Assessment requirements

- In-class test, 11 April, worth 30% of the final grade.
- Take home assignment, due 16 May, worth 20% of the final grade.
- Exam, during the exam period, worth 50% of the final grade.

All three assessments are designed to test students' ability to reason about the structures that we are studying. The take home assignment, in addition, gives the student some scope to be creative in his or her thinking about formal systems.

Penalties

Late assignments will receive a penalty of 5 points (approximately one half grade) for the first day overdue and one point per day after that.

Mandatory Course Requirements

None

Class Representative

A class representative will be elected in the first class, and that person's name and contact details will be available to VUWSA, the Course Coordinator and the class. The class representative provides a communication channel to liaise with the Course Coordinator on behalf of students.

Academic Integrity and Plagiarism

Academic integrity means that university staff and students, in their teaching and learning are expected to treat others honestly, fairly and with respect at all times. It is not acceptable to mistreat academic, intellectual or creative work that has been done by other people by representing it as your own original work.

Academic integrity is important because it is the core value on which the University's learning, teaching and research activities are based. Victoria University's reputation for academic integrity adds value to your qualification.

The University defines plagiarism as presenting someone else's work as if it were your own, whether you mean to or not. 'Someone else's work' means anything that is not your own idea. Even if it is presented in your own style, you must acknowledge your sources fully and appropriately. This includes:

- Material from books, journals or any other printed source
- The work of other students or staff
- Information from the internet
- Software programs and other electronic material
- Designs and ideas
- The organisation or structuring of any such material

Find out more about plagiarism, how to avoid it and penalties, on the University's website: http://www.victoria.ac.nz/home/study/plagiarism.aspx

WHERE TO FIND MORE DETAILED INFORMATION

Find key dates, explanations of grades and other useful information at www.victoria.ac.nz/home/study. Find out how academic progress is monitored and how enrolment can be restricted at www.victoria.ac.nz/home/study/academic-progress. Most statutes and policies are available at www.victoria.ac.nz/home/study/academic-progress. Most statutes and policies are available at www.victoria.ac.nz/home/study/academic-progress. (See Section C).

Other useful information for students may be found at the website of the Assistant Vice-Chancellor (Academic), at www.victoria.ac.nz/home/about-victoria/avcacademic.