UNIVERSITY OF CALGARY

FACULTY OF ARTS
DEPARTMENT OF PHILOSOPHY

PHIL 379 Lec 01 – "Logic II"

Fall Term 2013
Course Outline

Lectures: Tuesdays and Thursdays 12:30-1:45pm in MS 217

Instructor: Dr. Nicole Wyatt
Office: Social Sciences 1256A
Phone: 403-220-3166
Email: nicole.wyatt@ucalgary.ca
Office Hours: Mondays 1:30-2:30 pm

Text
Students will be provided with lecture notes and other support materials on the class website. In addition a variety of textbooks covering the class material have been placed on reserve at the library. An annotated list of the texts on reserve can be found on the class website.

PASS (Peer Assisted Study Sessions)
This course is supported by the PASS (Peer Assisted Study Sessions) program. PASS provides students with free, organized study groups facilitated by a student who has been successful in the course before. Attending PASS can help you build your understanding of course content as well as learn valuable study skills which will help you to succeed in the course. You will meet your PASS leader and receive more information in the first weeks of classes.

Description
A formal logic consists of a symbolic language together with a semantics, which captures the possible meanings or truth-conditions of the sentences of the language, and a deductive system, which aims to capture which inferences are correct. In this course we study the scope and limits of formal logic by examining the relationship between these three parts of a logic. The major results to be presented include soundness ("the deductive system captures only truths") completeness ("the deductive system captures all the truths") undecidability ("there is no mechanical procedure for establishing whether or not an argument is valid"), and the Löwenheim-Skolem theorems (which concern some of the limits on the expressive power of first-order logic). Along the way we will study some set theory, recursive functions, Turing-machines, and the limits of computation. The course is fast paced and students are expected to supplement lectures with significant independent study. **This course is primarily intended for honours students in Philosophy or Computer Science.**

This is a course in metalogic. It builds upon the material in Logic I (Phil 279 or Phil 377), but is very different in character. In Logic II, we prove theorems about logical systems (and not in logical systems, i.e., there will be almost no formal proofs). Doing well in Logic I is no guarantee that this will come easy to you. Some of the material we will be covering is discussed in your 279/377 text—if you used the *Logic Book*, review chapters 8 and 11; in Chellas' *Elementary Formal Logic*, review chapters 7 and 9 and the appendices; in *Language, Proof and Logic*, review chapters 15, 16, 18.1-18.3; in *Formal Logic: Its Scope and Limits*, sections 2.7-2.10, 313-3.15, 4.13-4.15.

Evaluation

Grades in this class will be based on weekly homework, four assignments, a take home test, and a take home examination. There will be NO Registrar-scheduled final examination.

Due Dates

Homework questions will be given on Tuesdays and due on Thursdays, with the first due September 26th. There will be no homework due on October 31st or November 7th. Assignments will be made available two weeks before the due date. The take home test will be made available on November 5th, and the take home exam will be made available on December 10th.

Assignment 1	Tuesday October 8th
Assignment 2	Tuesday October 22nd
Take Home Test	Thursday November 7th
Assignment 3	Tuesday November 19th
Assignment 4	Tuesday December 3rd
Take Home Exam	Thursday December 12th

Homework and assignments may be submitted either in-class, to the class drop box located in the Philosophy Department (12th floor Social Sciences), or electronically via the Blackboard site for the course. The take home test and exam may be submitted to the class drop box or via Blackboard. Submissions via email are NOT accepted.

Grading

- *Ceteris paribus*, the homework will collectively be worth 10%, the assignments will be collectively worth 40%, the test will be worth 25%, and the exam will be worth 25%.
- Students must receive a passing grade (D or better) on the take home exam in order to pass the course.
- Homework will not be individually graded, but answers will be discussed in class. Grades for the homework as a whole will be assigned as follows: 9 weeks submitted=A, 8=A-, 7=B+, 6=B, 5=B-, 4=C+, 3=C, 2=C-, 1=D, 0=F.
- Tests and assignments will be graded on both technical accuracy *and* quality of presentation, including spelling and grammar. As noted below in the grading rubric, an A answer must be correct but also reasonably direct and elegant.

Grading rubric

On each assignment and test question you will receive a letter grade reflecting the level of mastery of the material shown by the work you submit. According to the *Calendar* letter grades are defined as follows:

A Excellent—superior performance, showing comprehensive understanding of subject matter. (A solution to an assigned problem shows that you understand the problem, is complete and rigorously correct, and is reasonably direct and elegant.)

B Good—clearly above average performance with knowledge of subject matter generally complete. (You work demonstrates that you understand the problem and you give a complete solution, although there may be minor gaps in the proof, or the solution is correct but circuitous.)

C Satisfactory—basic understanding of the subject matter. (Your works shows that understand what the question is asking but your solution contains significant errors or gaps.)

D Minimal pass—marginal performance. (It is not clear from your answer that you understand what the question is asking, or your proposed solution goes completely in the wrong direction.)

F Fail—Unsatisfactory performance. (Your work fails to demonstrate that you've made a serious attempt to come to grips with the material; or your writing borders on incomprehensible.)

In computing your assignment or exam grade, your marks on individual questions will be converted to grade points as defined in the calendar (A = 4, B = 3, C = 2, D = 1, F = 0). There will be no +/– grades, but "slash" grades are possible and have grade point values 0.5 below the higher grade (e.g. A/B = 3.5). Each assignment or exam grade will be equal to the average of the grade point value of the questions (e.g. a 3 question assignment with grades A, B, B would receive a grade point score of 3.33). Your course GPA will be calculated according to the weights given above. *Ceteris paribus,* the final mark is the letter grade corresponding to the course GPA plus a margin of 0.1. For the final grade, +'s and –'s are possible too; as defined in the *Calendar*, +/– adds/subtracts 0.3 grade points. In other words, a course GPA of 3.9 or higher receives an final grade of A, at least 3.6 and less than 3.9 an A–, and so on. There is no D– grade. A+ is reserved for truly exceptional performance.

Late policy

Assignments will not normally be accepted after the deadlines unless special permission has been given by the instructor. Failure to submit an assignment or test on time will normally result in a mark of zero. Students who cannot submit an assignment or a test due to medical reasons or other reasonable grounds should contact the instructor as soon as possible.

Collaboration

Collaboration on homework and assignments is encouraged. However, you must write up your own solutions, and obviously you must not simply copy someone else's solutions. You are also required to list the names of the students with whom you've collaborated on the homework or assignment. ***If you collaborate without following these instructions, it constitutes cheating.***

Plagiarism

You might think that it's only plagiarism if you copy a term paper off the Internet. However, you can also plagiarize in a logic course, e.g., by copying a proof verbatim from the textbook or lecture notes (and only making the necessary changes to apply it to the assigned problem.) The point of logic problems which are similar to the proofs in the text or notes is to make you work through those proofs, understand them, and then prove a similar result on the homework or an assignment. Hence, all homework and assignment solutions must be in your own words; copying or paraphrasing closely from the text will be treated as plagiarism.

Course website

A course website on U of C's BlackBoard server has been set up. You will be automatically registered if you're registered in the class. To access the BlackBoard site, you can either go directly to blackboard.ucalgary.ca and log in with your UCIT account name and password, or you can access it through the myUofC portal (my.ucalgary.ca; log in with your eID). If you don't have an eID or UCIT account, see elearn.ucalgary.ca/help.html.

You may (and are encouraged to) submit homework and assignments online using the Assignment link on the left hand menu.

There will also be a collaborative work environment for the class set up on Piazza. Instructions for accessing the site can be found on the BlackBoard site.

Academic Honesty
Cheating or plagiarism on any assignment or examination is regarded as an extremely serious academic office, the penalty for which may be an F on the assignment, an F in the course, academic probation, or requirement to withdraw from the University. See the relevant sections on 'Academic Misconduct' in the current University Calendar. Intellectual honesty requires that your work include adequate referencing to sources. Plagiarism occurs when you do not acknowledge or correctly reference your sources. If you have questions about correct referencing, consult your instructor.

Academic Accommodation
It is the student's responsibility to request academic accommodation. If you are a student with a permanent disability or temporary impairment who may require academic accommodation, you must first register with the Student Accessibility Resource Office located in MacEwan Student Centre 452; phone 403-220-8237; email access@ucalgary.ca. Students who have not registered with the Student Accessibility Office are not eligible for academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course. Go to http://www.ucalgary.ca/access/ for further information.

Blackboard Help
Go to http://www.ucalgary.ca/computersupport/onlineservices/blackboard for Student Help and FAQs about Blackboard. Troubleshooting tips and a tutorial are available at http://elearn.ucalgary.ca/blackboard/students.

Student Advising and Information Resources

- General Academic Concerns – Have a question but not sure where to start? The Faculty of Arts' Program Information Centre (PIC) is your information resource for everything in Arts. Drop in at SS110, call 403-220-3580, or email artsads@ucalgary.ca. You can also visit the Faculty of Arts website at http://arts.ucalgary.ca/undersgraduate for detailed information on common academic concerns.
- **Program Planning –** For assistance and advice in planning your program through to graduation, contact the Student Success Centre at 403-220-5881 or visit it on the 3rd Floor of the Taylor Family Digital Library.
- **Advice on Philosophy Courses** - You may find answers to your more specific questions about a philosophy degree on the Department of Philosophy's website http://phil.ucalgary.ca or contact one of Philosophy's current Undergraduate Advisors (see below)
- **Registration Overload/Prereq Waivers** – If you are seeking to register in a Philosophy course that is full or to get permission to waive the prereqs for a course, email the instructor of the course.

Protection of Privacy
The University of Calgary is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act. The Department of Philosophy ensures the student's right to privacy by requiring all graded assignments be returned to the student directly from the instructor.

Student Ombudsperson and Students' Union Representatives
The Student Ombuds Office provides independent, impartial, and confidential support for students who require assistance or advice in addressing issues and concerns related to their academic careers. For more information see www.ucalgary.ca/provost/students/ombuds. For the Students' Union Faculty of Arts rep: arts1@ucalgary.ca.

Safewalk
Call 403-220-5333 (24/7/365) for a Safewalk volunteer to accompany you safely to your destination on campus including parking lots, housing, and the LRT station or use a Campus Help Phone.

PHILOSOPHY DEPARTMENT
The Department of Philosophy is located on the 12th floor of the Social Sciences Building
and on the web at www.phil.ucalgary.ca

PHILOSOPHY UNDERGRADUATE PROGRAM ADVISORS FOR FALL 2013:
Chris Framarin chris.framarin@ucalgary.ca
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Mark Migotti (Honours Program Advisor) migotti@ucalgary.ca

For assistance with registration issues in Philosophy courses, contact
Merlette Schnell (schnell@ucalgary.ca)