PHIL 210 Introduction to Symbolic Logic
(Summer 2017)

Schedule: MTWR 1:35 PM – 3:55 PM
Classroom: SADB 1/12
Instructor: David Gaber   david.gaber@mail.mcgill.ca

Course Description:
This course is an introduction to modern symbolic logic. Symbolic logic plays an important role in philosophy, linguistics, cognitive science, computing science, and mathematics, providing both a framework in which ideas can be expressed and a system for abstract reasoning about those ideas.

In this course, students will learn the basic features of symbolic logic that allow for its use in other fields as well as setting the stage for potential further investigations into logic itself. In particular, we will be learning the basic syntax (grammatical structure) and semantics (meaning) of the symbols as well as the rules for formally manipulating them to produce proofs. Class will consist of a mixture of lectures, question and answer sessions, as well as guided individual and small-group work wherein students will:

i)   Acquire proficiency in translating between natural language and logical notation
ii)   Learn and develop strategies for producing proofs within formal systems
iii)   Become familiar with the conceptual distinctions and technical vocabulary utilized in logic with regard to both formal and informal reasoning, and
iv)   Develop an understanding of both the uses and limitations of formal systems

This course is of potential use and interest to anyone, but is particularly relevant to individuals with an interest in analytic philosophy, linguistics or the philosophy of language, mathematics and the history and philosophy thereof, cognitive science, computer science, and/or the philosophy of science. As the course is being offered in a condensed format, students are strongly encouraged to budget extra time for practice and study above and beyond that required to attend classes and complete the homework.

Course Materials:
Textbook: Barker-Plummer, Barwise, Etchemendy et al.: *Language, Proof and Logic. Second Edition.* (Use of associated software "Tarski's World" is encouraged, but not required.)

Assignments and Evaluation:
Assignments (4 total)   *30%*
Mid-term (in class, May 18) *20%*
Final   *50%*

Assignments are due each Tuesday (beginning on the 9th) at the start of class, with the exception of the final assignment, which is due on the last day of class. Late assignments are penalized 10% per day overdue.

McGill Policy Statements

The following two statements **must** be included in all course outlines, in keeping with various Senate resolutions.

1. *"McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures" (see www.mcgill.ca/students/srr/honest/ for more information). (approved by Senate on 29 January 2003)*

« L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/students/srr/honest/).»

1 http://www.mcgill.ca/secretariat/policies/students/handbook-student-rights-and-responsibilitiesle-recueil-des-droits-etobligations-

2. *"In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded." (Approved by Senate on 21 January 2009 - see also the section in this document on Assignments and evaluation.)*

« Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue). »