Phil 6a: Introduction to Symbolic Logic

Who, When, and Where
Professor Jennifer S. Marusic
Monday, Wednesday, Thursday 11:10-12:00
Location TBD

Office: Rabb 265
Telephone: 781-736-3515
E-mail: jmarusic@brandeis.edu
Office hours: Monday, Wednesday 1-2 pm and by appointment

Course Description
Symbolic logic provides a rich set of tools for analyzing and evaluating arguments. Logic is not just a body of knowledge, it is also a skill. Learning logic is much like learning to speak a language or play an instrument: one begins with relatively simple concepts and techniques and—with practice—eventually progresses to more complex ones. For this reason, the course will aim to introduce students to fundamental logical concepts and techniques in a hands-on way, with a focus on solving problems.

The course will be divided into two parts. The first part of the course will introduce sentential logic, a system that takes sentences to be the basic units of logical analysis. We will learn techniques for symbolically representing sentences; we will be introduced to concepts such as validity and invalidity, logical equivalence, and logical consequence; and we will develop a natural deduction system and study some of its properties. In the second part of the course, we will study predication and quantification, allowing us to analyze more complex arguments. Throughout the class we’ll keep an eye on the application of symbolic logic to philosophy.

Requirements
Students will be required to complete 10 problem sets, due at the beginning of class on Thursdays. There will be a midterm, held during class, and a final exam.

Grading
The 10 problem sets will be worth 50% of the grade for the class. The midterm will be 15% and the final exam will be 25% of the final grade. Attendance and participation will account for the remaining 10%.

Late assignments will be deducted one third of a grade (e.g. from a B to a B-) for each day they are late. No assignments will be accepted more than one week late. If you need an extension on an assignment, whether because you have work due in other classes on the same day or for personal reasons, please ask me. I am willing to grant short extensions, provided you ask for them at least a full day in advance. If you
are unable to complete an assignment on time because of an unexpected illness, please let me know as soon as possible.

**Class Participation**
You are expected to attend class regularly. Good attendance is not, however, sufficient to ensure a good class participation grade. You are also expected to come to class prepared and to have done the reading. Substantial class time will be spent doing practice problems—you will frequently be asked to work in smaller groups or at the board solving problems. Bring the textbook with you to class!

**Readings**

2) Additional handouts.

**Laptops and Cell Phones in Class**
You may use a laptop to take notes during class, if you wish. However, please do not use your laptop to surf the net, answer e-mail, or do any work not directly related to the lecture during class. If I catch you using your laptop inappropriately, it will seriously affect your participation grade and I will ask you not to use a laptop in class anymore.

Absolutely no cell phones or text messaging during class!

**Academic Integrity at Brandeis**
Academic integrity is central to the mission of educational excellence at Brandeis University. Each student is expected to turn in work completed independently, except when assignments specifically authorize collaborative effort. It is not acceptable to use the words or ideas of another person without proper acknowledgement of that source.

Violations of University policies on academic integrity, described in Section Three of Rights and Responsibilities, may result in failure of the course or on the assignment, or in suspension or dismissal from the University. *If you are in doubt about the instructions for any assignment in this course or about how to properly cite the sources you’ve used, it is your responsibility to ask for help.* If you have questions about academic integrity, please do not hesitate to ask me, refer to the Rights and Responsibilities Handbook, or contact the office of Student Development and Conduct.

A note about collaboration on the assignments. You are encouraged to form study groups outside of class to discuss the problem sets. While you may discuss the assignment questions with others, you must cite any ideas you get from your
classmates and you must write up your answers to the assignments independently. If I find that several students turn in inappropriately similar answers to the assignment questions, I will not hesitate to bring the matter to the Department of Student Development and Conduct.