### PHI170 - 3 credits

## INTRODUCTION TO LOGIC

time & venue

*Tu* 12:30-01:45 in C-350

Tu 06:15-07:30 in C-349

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office hrs Tu 5:00-6:00 in C-365

#### **Best In Show**







## What is logic?

Logic is the study of reasoning. Logic offers general methods – known as *logical systems* – for distinguishing good from bad reasoning. The most widely accepted logical system is called *classical* logic, but there exist other less standard logical systems known as *non-classical* logics, each offering a different method for distinguishing good from bad reasoning. As it turns out, what counts as good reasoning according to one logical system might count as bad reasoning according to another system. How can that be? Take this course to learn the answer.

#### Is this course for me?

Some students find logic useful when they take the LSAT while applying for Law School or when they take other courses in philosophy, psychology, economics and business, mathematics and computer science. Logic is useful for studying other subjects because reasoning is everywhere. Logic helps us to unravel, clarify and if necessary criticize what we often leave implicit – the structure of our reasoning.

#### What will I learn?

You will familiarize yourself with the building blocks of a logical system, such as atomic and complex formulas, logical connectives ("and", "or", "implies", "not"), truth-tables, tautologies, contradictions, validity and derivability. We will examine three logical systems: propositional, syllogistic and predicate logic. For each system, we will study the *syntax* (i.e. how to write grammatically correct logical formulas), *semantics* (i.e. how to assign meaning to these formulas) and *proof theory* (i.e. how to construct formal proofs). This probably all sounds quite obscure right now, but will soon become clear.

#### Does this course have a website?

Yes, it does. Videos, slides and other course materials are available at

### www.marcellodibello.com/phi170/

You should check the website regularly, at least once a week. *Blackboard will not be used*. The schedule with topics to be covered each week is posted on the website.

### Is there a textbook?

There is no required textbook for this course. The course website contains links to videos, slides and others materials. These should give you all you need to successfully complete this course. If you want to learn more about a topic, you may consult the book "Logic in Action" available at

### www.logicinaction.org

This book is a place where you can strengthen your knowledge or explore new topics.

## Is this a hybrid course?

Yes, it is. This means that half of the course happens on-line and the other half in the classroom. Make sure you watch the videos and read the course materials assigned each week before coming to class. Check the course website. If you come to class – and I encourage you to come – you will have the opportunity to ask questions and complete exercises that can help you solve the homework exercises.

### How will I be graded?

Your final grade will depend on:

weekly homework assignments 40% total

one midterm and one final 30% each

Homework assignments and respective deadlines are posted on the course website. Exams and homework assignments will be graded on a scale from 0 to 100. Here is the conversion from numbers to letter grades: A range: above 85; B range: between 85 and 70; C range: between 70 and 55; D range: between 55 and 40; F range: below 40.

### Will grades be curved?

Grades will not be curved, but typically grades tend to be clustered around the C and B ranges with few students getting A's or D's.

## Is there a late submission policy?

If you hand in your homework late, you will *not* get credit for it. Exceptions will be granted on a case-by-case basis if you can provide a well-documented reason for being late.

#### What if I am stuck?

Logic can be hard and it is normal to get stuck sometimes. *Come talk to me!* I am here to help you succeed in this course. I am available via email or during office hours.

# Are there tutoring services for this course?

The Academic Center for Excellence provides tutoring in the humanities, social sciences, and writing. Please visit their website at www.lehman.edu/issp or call 718-960-8175.

## I have a disability. Can you help me?

Students with disabilities who may need classroom accommodations are encouraged to register with the Office of Student Disability Services. For more information, please contact the Office of Student Disability Services, Shuster Hall, Room 238, at 718-960-8441.