Introduction to Logic,
Tuesdays and Thursdays, 1:00-2:15
Instructor: Apaar Kumar
Office Hours: Humanities Hall 205, every Tuesday and Thursday 2:15-4:45
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Content: If we are concerned with reasoning well (as most of us are, in both our private and professional lives), we should be willing to make an attempt to learn from the efforts of the logicians who have tried to illuminate the principles of reasoning and developed techniques for evaluating the correctness of a rational argument. In this course, we will make such an attempt in order to (hopefully) learn to think more clearly and to acquire more skill in distinguishing between convincing and unconvincing arguments.

Text:

Copi, Irving and Carl Cohen, *Introduction to Logic*, 13th Edition. New Jersey: Pearson, Prentice Hall, 2009. (Available at the Oxford Bookstore)

Course Requirements:

(1) Honor Code: It is assumed that you are familiar with the honor code and understand the implications of academic misconduct. Cheating on exams and quizzes will not be tolerated. If you're caught cheating on the quizzes and exams, you will be referred to the honor council.

(2) Absence Policy: You will not be penalized for absences if there is a valid reason and if you have informed me in advance. In cases of illness, a letter from the Student Health Center is required. Four unexcused absences will cost you a letter grade.

(3) Course Requirements:

(a) As is usually the case, you will read the material in advance before we discuss it in class – so, for instance, when you come to class on September 1st, you will have read pp. 4-53 of your textbook.

(b) At the end of each class, you will be given homework, which is due (via email) no later than 6pm on the day prior to which the class is to be held (so Monday 6pm for a Tuesday class and Wednesday 6pm for a Thursday class). For instance, if I give you a set of exercises on the 27th of August, they are due no later than August 31st, 6pm. For the most part, these exercises will be directly related to the reading assigned for the next class – in this example, the reading assigned for 1st September.

(c) The pace of the course will be dictated by our progress in class, and the syllabus may have to be changed to accommodate it. New versions of the syllabus (if required) will be sent in advance via email (we will have a list serve).

(d) There will be 10 quizzes over the course of the semester, a mid-term exam and a final exam. The quizzes will be 25 minutes each. The mid-term exam will be 75 minutes. The final exam will be cumulative and last 3 hours. There will be no make-up quizzes or exams unless you have a genuine reason for missing them (refer to Absence policy above).

(e) Grading: Overall grades for the course will be calculated according to the following 1000-point scale:

A=	950-1000	B-=	800-832	D=	600-699
A-=	900-949	C+=	767-799	F=	Less than 600
B+=	867-899	C=	733-766		
B=	833-866	C-=	700-732		

The grade distribution is as follows:

Final Exam: 30% of the Grade
Mid-term Exam: 25% of the Grade
Quizzes: 25% of the Grade
Homework: 15% of the Grade
Class participation: 5% of the Grade

Note: While you will receive a grade on the quizzes and the two exams, the homework is worth a negative grade. You will get credit for honestly doing the homework and sending it on time. It will not matter whether the solution to a problem is correct or not as long as you've sincerely tried to solve it. So this is an easy way of securing 15% of your grade! If you fail to send me the homework or do not make the deadline, you lose points – 10 points each the first three times and a letter grade on the fourth occasion. Further Note: You can work in groups when you are doing homework. But if you copy and paste someone else's work, all the parties involved will be penalized (the penalty could include losing a letter grade).

Reading Schedule

August 27   Introduction

Key Concepts

September 1   Copi and Cohen, 4-53
                 Homework: pp.9-11: 2, 5, 6, 8, 13; pp. 22-26: 3, 5, 8, 12, 17, 20; p. 35: 3, 8; pp. 39-41: 3,
                 6; pp. 49-50: 4, 8; pp. 51-53: 2, 6

September 3   Copi and Cohen, 53-117

Fallacies

September 8   Copi and Cohen, 118-54
                 Quiz: Key Concepts

September 10   Copi and Cohen, 157-66

Deduction: Classical Logic

September 15   Copi and Cohen, Categorical Propositions, 180-205
                 Quiz: Fallacies

September 17   Copi and Cohen, Categorical Propositions, 207-223

September 22   Copi and Cohen, Categorical Syllogisms, 224-44
                 Quiz: Categorical Propositions (Ch. 5)

September 24   Copi and Cohen, Categorical Syllogisms, 244-59

September 29   Copi and Cohen, Syllogism in Ordinary Language, 267-87
                 Quiz: Categorical Syllogisms

October 1   Copi and Cohen, Syllogism in Ordinary Language, 287-314

October 6	Copi and Cohen, Syllogism in Ordinary Language, 287-314 (cont.) **Quiz**: Syllogism in Ordinary Language (Ch. 6 and 7)
October 8	**Midterm Exam**
October 12-13	Fall Break

Deduction: Modern Logic

October 15	Copi and Cohen, Symbolic Logic, 315-39
October 20	Copi and Cohen, Symbolic Logic, 342-57
October 22	Copi and Cohen, Symbolic Logic, 357-71
October 27	Copi and Cohen, Method of Deduction, 372-90 **Quiz**: Symbolic Logic (Ch. 8)
October 29	Copi and Cohen, Method of Deduction, 393-416
November 3	Copi and Cohen, Method of Deduction, 421-35
November 5	Copi and Cohen, Quantification Theory, 437-52
November 10	Copi and Cohen, Quantification Theory, 454-61 **Quiz**: Method of Deduction (Ch. 9)
November 12	Copi and Cohen, Quantification Theory, 463-67 & 468-72

Induction

November 17	Copi and Cohen, Analogical Reasoning, 482-511 **Quiz**: Quantification Theory (Ch. 10)
November 19	Copi and Cohen, Causal Reasoning, 512-36
November 24	Copi and Cohen, Causal Reasoning, 536-557
November 25-29	Thanksgiving Recess
December 1	Copi and Cohen, Science and Hypothesis, 559-86 **Quiz**: Causal Reasoning (Ch. 11)
December 3	Copi and Cohen, Probability, 588-612
December 8	Review **Quiz**: Science and Hypothesis & Probability (Ch. 11 & 12)
December 14	**Final Exam – 9:00 AM-12:00 PM**