Introduction to Logic
Tuesdays and Thursdays, 2:30PM-3:45PM
Instructor: Apaar Kumar
Office Hours: Humanities Hall 205, every Tuesday and Thursday 4:00-7:00PM
Email: akumar6@learnlink.emory.edu

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. Three unexcused absences will cost you a letter grade.

(3) 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) To ensure that you come prepared to class, I will assign homework after every class (via the learnlink conference). You will have to send me this work via email to the following address: akumar6@emory.edu with the subject heading "Logic-11:30." The homework assigned for a Tuesday class needs to be sent to me by 8pm on Monday, and the homework assigned for a Thursday class needs to be sent to me by 8pm on Wednesday. For the most part, homework will be directly related to the reading assigned for a class.

(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 to you in advance via the learnlink conference. CHECKING THE LEARNLINK CONFERENCE IS YOUR RESPONSIBILITY.

(d) There will be 3 quizzes over the course of the semester, a mid-term exam and a final exam. The quizzes will be between 30 and 40 minutes each. The mid-term exam will be 75 minutes. The cumulative final exam will be 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

(f) You will have to do two types of homework: (i) Regular Homework: You will have to send me homework before every class. You will get credit for honestly doing 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. (ii) Homework (Pass/Fail): A set of problems to be done at home. The difference between (i) and (ii) is that I will be correcting Homework (Pass/Fail) and giving it back to you, so that you're better prepared for the quizzes, etc. Note: You can work in groups when you are doing homework. But if you copy and paste someone else's work, all parties involved will be penalized (the penalty could include losing a letter grade).

Grading Policy (Homework): While you will receive a grade on the quizzes and the two exams, the homework is worth a negative grade. You will lost 10 points each time you fail to send me regular homework, and you will lose 25 points each time you fail to send me Homework (Pass/Fail). If you always send both throughout the semester, then you will secure 15% of the grade. Since it does not matter if the solutions to the homework problems are correct or not as long as it is CLEAR that you've done it yourself and genuinely attempted to solve the problem, this is an easy way of securing 15% of your grade!

Reading Schedule

August 26   Introduction

Key Concepts

August 31   Copi and Cohen, pp. 4-9 & 12-21
                 Homework: pp.9-11: 2, 5, 6, 8, 13; pp. 22-26: 3, 5, 8, 12, 17, 20

September 2   Copi and Cohen, pp. 26-35

September 7   Copi and Cohen, pp37-38, 41-48 & 53-57

September 9   Copi and Cohen, 71-73, 79-81 & 84-5
                 Homework (Pass/Fail) Assigned

September 14   Copi and Cohen, 88-95, 96-9, 99-101, 102-4 & 105-9

Fallacies

September 16   Copi and Cohen, pp. 118-135
                 Quiz

September 21   Copi and Cohen, pp. 141-54

September 23   Copi and Cohen, pp. 157-67

Deduction: Classical Logic

September 28   Copi and Cohen, Categorical Propositions, 180-6, 187-92, 193-7

September 30   Copi and Cohen, Categorical Propositions, 198-205

October 5   Copi and Cohen, Categorical Propositions, 207-21

October 7   Copi and Cohen, Categorical Syllogisms, 224-8, 230-2, 233-42
    Quiz

October 11-12 Midterm Break

October 14   Copi and Cohen, Categorical Syllogisms, 233-42

October 19   Copi and Cohen, Categorical Syllogisms, 244-49

October 21   Copi and Cohen, Syllogism in Ordinary Language, pp. 267-71, 272-80 & 281-83

October 26   Copi and Cohen, Syllogism in Ordinary Language, pp. 287-90

October 28   **Midterm Examination (Cumulative)**

November 2   Copi and Cohen, Syllogism in Ordinary Language, pp. 294-5

November 4   Copi and Cohen, Syllogism in Ordinary Language, pp. 298-302 & pp. 305-9
    Homework Pass/Fail Assigned

Deduction: Modern Logic

November 9   Copi and Cohen, Symbolic Logic, pp. 315-26 & 331-39

November 11   Copi and Cohen, Symbolic Logic, pp. 342-44 & pp. 346-55

November 16   Copi and Cohen, Symbolic Logic, pp. 357-61 & 363-69
    Homework Pass/Fail Assigned

Induction

November 18   Copi and Cohen, Analogical Reasoning, 482-87, 491-96 & 503-6

November 23   Copi and Cohen, Causal Reasoning, 512-22, 525-8 & 532-3

November 24-28 Thanksgiving Break

November 30   Copi and Cohen, Causal Reasoning, 536-7, 540-3 & 547-9,

December 2   Copi and Cohen, Science and Hypothesis, 559-80
    Quiz

December 7   Copi and Cohen, Probability, 588-94, 597-602 & 603-9

December 14   **Final Exam – 7:00 AM-10:00 PM**