Philosophy 2300 Logic
Spring 2013 (3 credits)

Instructor: Joseph Johnson
Office: Social Science 4097
Office hours: by appointment

Tel: (678) 797-2281
E-mail: joseph_johnson@kennesaw.edu

COURSE DESCRIPTION: The course is an introduction to deductive logic with focus on the theoretical and practical aspects of categorical propositions and syllogisms, truth function logic, the method of natural deduction, and predicate logic.

PREREQUISITE: ENGL 1102 and MATH 1101 (or equivalent).

REQUIRED TEXTBOOKS

COURSE OBJECTIVES / LEARNING OUTCOMES
As a result of taking this class, students will acquire the ability to:

• Understand the technical meanings of “proposition,” “argument,” “validity,” and “soundness.”
• Translate statements/arguments of natural language into the symbolic notation of both propositional and predicate logic.
• Use truth tables to determine the validity/invalidity of arguments in propositional logic.
• Use a method of natural deduction to prove arguments in propositional logic.
• Use an expanded method of natural deduction to prove arguments in predicate logic.

ATTENDANCE POLICY: Attendance is mandatory! You simply will not be able to do well in this course without complete attendance. It is also necessary to keep exact pace with the material covered, since every discussion builds on and extends the previous one (just as in a math class). Responsibility for material covered while absent is the sole responsibility of the student.

GRADING: We are going to focus on formal, propositional and predicate logic. To make sure that we complete our study of predicate logic—noting that many instructors do not—we will focus on just the following four chapters: 1, 7, 8, and 9. Accordingly, there will be four exams, weighted, for purposes of calculating the final course grade, as follows: Chap. 1 = 10%, while Chaps. 7, 8, and 9 will each count for 30%. IF we do indeed finish this study of formal logic with time to spare(?), we will go back and study Chap. 4, Informal Fallacies, and adjust the weighting of the other chapters. Or, IF it takes all of our time just to complete the material on formal logic, Chap. 4 will be left for self-study and extra-credit points. There will only be these exams that I check, though it is imperative that you constantly work through the study problems and self-check. (If you neglect this, you will surely fail the exams, so the responsibility is yours.) Makeup exams will be given only in special circumstances that have been discussed in advance. If unavoidable circumstances arise, making it impossible to attend scheduled exams, you must notify me immediately—same day, and prior to the exam if possible—by phone, voicemail, or e-mail. Acceptance of excuses is at my prerogative. The last test will be at the assigned time during exam week.
--Schedule--

Note: The actual date of exams will be determined by our progress in class. However, we will definitely complete the following, our emphasis being on formal, deductive, symbolic logic up through predicate logic:

Chap. 1  What Logic Studies  
**Exam**

Chap. 7  Propositional Logic  
**Exam**

Chap. 8  Natural Deduction  
**Exam**

Chap. 9  Predicate Logic  
**Exam**
ACADEMIC HONESTY: Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.