Phil. 101: Logic, Reasoning, and Persuasion   Dr. Steven Kang
Spring 2010, Rutgers Univ., New Brunswick   Office Hrs.: Sat. 12:00-12:30pm, or by App.
Sat. 9:00 - 11:55am, Scott Hall102   st7kang@rutgers.edu / sk45@columbia.edu

Logic, Reasoning, and Persuasion

1.   Course Description / Objectives

The objective of the course is to augment the student's analytical and critical thinking abilities through the study of logic (formal and informal) and arguments of various nature. Students will develop reasoning skills to rigorously analyze and evaluate arguments by others and to cogently formulate their own arguments.

2.   **Grade Determinants**

2.1.   (20%) Attendance with in-class Exercises

Doing exercises and discussions in class along with your peers and instructor is the most important thing for you to do well in this course. To encourage and help you to do that, the attendance is required as mandatory and will be ascertained in every class. The two points per undocumented absence (after one time absence, documented or otherwise) will be taken off from your final weighted average.

2.2.   (30%) Mid-term Exam (take-home) … Sat., March 6th (tentative)

If some extenuating circumstances prevent you from taking mid-term exam on the set date, you should inform your instructor beforehand by submitting a letter (or email) to explain the situation along with supporting documents; if found to be legitimate, a make-up exam will be granted without any penalty (which otherwise will be 10% reduction).

2.3.   (40%) Final Exam (take-home) … TBA

The final exam will be comprehensive, but mostly concerned with what to be studied after mid-term. There can be "no" make-up exam for the final as it is "logistically infeasible."

2.4.   (10%) 10-page essay

The single most important criterion is to be "argumentative" on any subject of your choice. As shall be made plain in due time, it is to be combined with an analytically rigorous "reconstruction" of your own essay.

3.   **Course Materials**

    3.1.   Anthony Weston (recommended)
            A Rulebook for Arguments
            Hackett Publishing, 3rd edition (2000), [ISBN: 0872205525].

    3.2.   Alan Hausman, Howard Kahane, & Paul Tidman (recommended)
            Logic and Philosophy: A Modern Introduction
            Thomson/Wadsworth, 10th edition (2006), [ISBN: 0495128449].

    3.3.   Reading materials from various sources (which are critically relevant and timely to the class discussions) will be distributed through emails in PDF files.

4.   **Course Contents** … (subject to revision)

Along with learning basics of informal and formal logic in a mixed and incremental manner, we will take up arguments of various kinds: social, current, moral, or legal; scholarly or non-scholarly (or philosophical or non-philosophical), to do critical analysis (i.e., by doing *Reconstruction & Evaluation*):

Part A: **Preliminaries**

- ♦ Rationality as a distinctive human attribute
- ♦ Reasoning, Argument, and Logic
- ♦ Truth, Validity, and Soundness
- ♦ Deduction v. Induction
- ♦ Dynamic Interactive Nature of Argumentation
- ♦ Fallacies: Begging-the-Question, etc.

Part B: **Informal Logic (1)**:   Expansionary Mode

- ♦ *Reconstruction* and *Evaluation*
- ♦ Enthymeme
- ♦ Case of Capital Punishment
- ♦ Case of Illegal Drugs
- ♦ Extended Argument with Sub-Argument
- ♦ Proposition as Linguistic Entity & Truth-Value
- ♦ Modality: 3 Dichotomies
- ♦ Conditionality: Sufficiency and Necessity
- ♦ Case of Government Deficit, etc.
- ♦ Case of Free Will and Human Agency
- ♦ Case of Rutgers' Football
- ♦ Case of Ultimate Cause
- ♦ Case of Omnipotence and Omnibenevolence
- ♦ Topic-Neutrality

- ♦ Case of Divine Perfection & Realness
- ♦ Case of God's Existence & Imperceivability
- ♦ Case of Stone Paradox

Part C: ***Formal Logic***

- ♦ Sentential Logic: Atomic-Compound Sentences, & Connectives
- ♦ Truth-Functionality v. Non-Truth-Functionality
- ♦ *Reductio Ad Absurdum*
- ♦ Law of the Excluded Middle
- ♦ Principle of Contradiction
- ♦ *Modus Ponens*, *Modus Tollens*, & Contraposition
- ♦ Disjunctive & Hypothetical Syllogism
- ♦ Simplification, Conjunction & Addition
- ♦ De Morgan's Law
- ♦ Implication
- ♦ Equivalence & Biconditionals
- ♦ Conditional & Indirect Proofs
- ♦ Predicate Logic and Syllogism
- ♦ Causal Nexus and Quantification

Part D: **Informal Logic** (2):   Contractive Mode

- ♦ *Reconstruction & Evaluation*: Revisited
- ♦ Case of *5 Ways*
- ♦ Case of Ockham's Razor
- ♦ Case of Theodicy
- ♦ Case of Abortion
- ♦ Case of Affirmative Action
- ♦ Case of Distributive Justice

5.   ***Nota Bene***

5.1.   This course is quite distinctive from others in that its purpose is not to convey certain objective amount of knowledge but to *nurture* non-quantifiable critical thinking skill, i.e., analytically rigorous mind-set. It shouldn't be surprising, then, that what is required is not necessarily a typical digestion of pieces of information through reading that anyone can do alone; but rather engaging in a series of Socratic exchange of questions and answers in class with your peers and your instructor. Therefore, class participation, not to mention attendance, is strongly encouraged, as we shall do many exercises together dealing with diverse concrete examples of argument. While reading shall be confined to a modest amount, we will go deeper than usual to critically analyze *reasoning* itself as expressed in the form of *argument*.

5.2.	Email communication is very vital in this course as means of sending and receiving materials. Everyone in the class is required to send the following information to instructor's email ("not to be left out of email list database"):

> (1)	Last Name, First Name
> (2)	2 Email Addresses (one major + another for backup)
> (3)	Major & Year (e.g., Chemistry, Junior)

5.3.	In order for your email to be properly identified in your instructor's sea of emails, you should put the following line in the subject heading of your email:

> LRP, S10, Last Name, "Brief Description of Contents" (e.g., mid-term exam)

5.4.	You are expected to check your email regularly for information about the class & reading materials from your instructor, which are relevant to the progression of the course in a timely manner.