Introduction to Logic

1. Course Description / Objectives (Core Curriculum)

The objective of the course is to augment students’ analytical and critical thinking through the study of formal logic. The students will learn philosophical concepts and introductory tools for valid reasoning and proof in modern logic.

2. Grade Determinants

2.1. (50%) Online Exercises

* pass/fail-based Exercises in Modules
* on a weekly basis: assigned on Thursdays, due by Wednesdays

2.2. (50%) In-class Final Exam

* in accordance with the university policy on online classes, one-time final exam to be held "in class" on Wed., 07-02 (tentative), 6-9pm.

3. Course Textbook

Hausman, Alan, Howard Kahane, & Paul Tidman

*Logic and Philosophy: A Modern Introduction*

Thomson/Wadsworth (current or any old edition)
4. **Course Contents**: 4-Part Composition

*Part 1. Introduction*

1.1. "Being Logical, Reasoning, & Argument"
1.2. Understanding Arguments Informally
1.3. Understanding Arguments Rigorously & Formally

*Part 2. Semantics with Truth Tables*

2.1. Formalizing Arguments in Sentential Logic
2.2. Utilizing Truth Tables

*Part 3. Syntax with Sentential Logic*

3.1. Inference Rules
3.2. Deriving Conclusion from Premises: Proof

*Part 4. Syntax with Predicate Logic*

4.1. Formalizing Arguments in Predicate Logic
4.2. Analyzing Syllogistic Arguments in Predicate Logic

Nota Bene: The whole contents of the course will be further compartmentalized into a series of 70 – 80 modules.

5. **Course Structure: Modus Operandi**

The whole course is designed to let students study "online" from the start to finish via pre-recorded multimedia material. Streaming videos (in mp4 file) will be made available as the main medium of course instructions.

Each week (tentatively every Thursday evening), a set of new will be uploaded onto the course website at Sakai along with for-credit or non-credit exercises. The for-credit exercises will be due in a week (by Wed. midnight). Sakai will not accept any submission of the exercises after the set due time. They are progressively arranged so as to promote independent, steady and cumulative studies, where students may move to the next module only when they finish the studies with the current one.

This modus operandi is in accordance with the fact that in order for an
online course to be successful, students should study course materials in a **persistent and steady** manner. Students should not expect that they might be able to absorb course materials at the last minute simply because they can be accessed at any convenient time. For that reason, students should maintain individual **self-discipline** at the utmost level. Another equally important reason is because logic as a field of study is distinctively **rigorous and cumulative**. (Students are hereby advised not to take this advice lightly at all. You will be overwhelmed soon unless you keep up with the pace of progress.)

6. **Website and Email**

Logon to Sakai with your Rutgers NetID and password at:

https://sakai.rutgers.edu/portal

Select this course (01:730:201), and you will find the course contents arranged hierarchically and progressively on the left column of the website.

Along with the website, the email communications are vital in this course. Everyone is required to send the following information to instructor's email ("not to be left out of email database"):

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

Use the following email addresses of mine, unless noted otherwise:

dr.steven.kang@gmail.com
(backup: st7kang@rutgers.edu)

Everyone will be given a 3-digit ID, which should be used in the subject line of your email as follows:

Your 3-digit ID, Your 1st Name, Your email contents (brief)
e.g., B07, Thomas, login issue

In the absence of this subject line, your email might be lost in the sea of emails. Be sure to follow this simple instruction for effective email communications.
7. **Note on IT aspect of e-Learning**

The adoption of video-streaming (in 'mp4' files) for making course contents available asynchronously has been a careful choice by your instructor to utilize one of the most updated multimedia compression technologies. I have had quite satisfactory experiences with it, which I wouldn't expect anything less this time as well.

Surely, there will be always room for improvement in terms of catching up ever-changing IT; and also we have to grant that especially in terms of interactivity on the spot between instructor and students, online instructions should not be compared to in-class instructions. But from my past experiences, I am totally convinced that students can learn course materials online as effectively as in-class. It is a "huge" advantage that course materials can be accessed at any time convenient for students and as many times as needed.

8. **Note on disabilities accommodations**

“Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.”