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.

This course has been certified as a Core Curriculum course:

SAS Core Code: Mathematical or Formal Reasoning (QR)
"Apply effective and efficient mathematical or other formal processes to reason and to solve problems."

for more info, visit http://sasoue.rutgers.edu/core/core-learning-goals

2. Grade Determinants

2.1. (50%) Online Exercises

* via assignments on pass/fail basis

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 the last day
* scheduled on Fri., Jan. 18th, 1 - 4:00pm
* location ... TBA on College Ave. Campus in New Brunswick
3. Course Textbook

Hausman, Alan, Howard Kahane, & Paul Tidman
*Logic and Philosophy: A Modern Introduction*
Thomson/Wadsworth (current or any old edition)

4. Course Website (at Sakai)

- We shall be using *Sakai* (not Blackboard) for many superior features; logon to *Sakai* with your Rutgers NetID and password at:

  https://sakai.rutgers.edu/portal

- Select the course website for this course:

  19W Logic (K)

5. Course Contents

The whole course is divided into the following 5 parts:

- Part 1. Introduction (Preliminaries)
- Part 2. Semantics with Truth Tables
- Part 3. Syntax with Sentential Logic (1)
- Part 4. Syntax with Sentential Logic (2)
- Part 5. Syntax with Predicate Logic

This 5-part composition corresponds to the structure of the course website at Sakai, which will be further compartmentalized into a series of more than 60 modules.

Each module is typically comprised of the following three components:

1. Lecture on Video (in streaming video of MP4 file)
2. Reading assignment from the textbook
3. Exercise assignment (non-credit / for-credit with * mark)

These modules are hierarchically arranged in a sequential manner, so that students are to move forward to the next module when they can fully grasp the instructional contents presented in the current module. (Occasionally, students might want to review the previous modules, and indeed, they can. This is one of the great advantages of online class.)
6.  **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, while the for-credit exercises are often made from the textbook.)

On a regular basis, a set of new modules will be opened up with lectures on video, reading assignments, and the exercises (non-credit and/or for-credit). The for-credit exercises will be due by the set date and hour. 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.

The for-credit exercises will be evaluated and given credits to on pass/fail basis. The answers and feedback will be made available along with credit points granted to those who submit the assignments by due. (Given the short period of Winter session, no late submissions shall be accepted.) It is incumbent upon students to check the feedback (as well as the credit status) from which to correct mistakes (if any), and to improve understandings.

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 soon overwhelmed unless you keep up with the pace of progress, especially in Winter session.)

7.  **Email Communications**

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 your instructor:

Logic.dr.kang@gmail.com
(backup: dr.steven.kang@gmail.edu)
8. **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 (quite often even better than in-class). It is a huge advantage that course materials can be accessed from any place and time convenient for students, and as many times as necessary.

9. **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.”