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. **(60%) Online** Exercises

      *. pass/fail-based Exercises in Modules

   2.2. **(40%) 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. 15th, 6 - 9:00pm

      *. 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 Contents

The whole course is divided into the following 4 parts:

Part A. Introduction (Preliminaries)
Part B. Semantics with Truth Tables
Part C. Syntax with Sentential Logic
Part D. Syntax with Predicate Logic

This 4-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.)

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, while the for-credit exercises are often made from the textbook, not to mention reading assignments.)

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 (after which Sakai will not accept any submission). 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 feedback will be given to each and every for-credit exercise individually. 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.)

6. Virtual Meetings via Adobe Connect

It is your instructor's intention to utilize a very powerful multimedia-intensive platform called Adobe Connect available at Sakai as a virtual space and time where we can meet (a Skype-like environment with additional features such as chatting and white board). While all the instructions are conducted in an asynchronous manner, this virtual meeting should be in a synchronous mode at a designated time where students can ask questions on real-time basis. It is an optional feature of fully online course which this class is intended to be, where students are totally liberated from spatial-temporal confines of traditional instructional environment.

Students who want to exercise this optional feature should send an email to inform instructor of not only your intention to visit but also of specific questions one wants to ask principally about the last assignment (after the feedback to your for-credit exercises). There might be some IT-related hurdles to overcome to take advantage of all the state-of-the-art technologies (e.g., webcam). More detailed instructions will be given via email as the course progresses. In any event, the timely email communications as the standard alternative will be quite effective as usual.

7. Course Website at Sakai

Logon to Sakai with your Rutgers NetID and password at:

https://sakai.rutgers.edu/portal

Select this course:

16W Logic

On the left column, you will find the course contents, where the aforementioned four parts are arranged hierarchically and will be made progressively:

- Part A. Preliminaries
- Part B. Semantics with Truth Tables
- Part C. Syntax with Sentential Logic
- Part D. Syntax with Predicate Logic
8. **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, unless noted otherwise:

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