Philosophy 201: *Introduction to Logic* (01:730:201:05/06) Rutgers, The State University of New Jersey, New Brunswick, Fall, 2021 Hybrid Course via *Canvas* (in-class meeting, Fri., 3-4:20pm/5-6:20pm, FH-A5) Prof. Steven Kang (Logic.dr.kang@gmail.com / st7kang@rutgers.edu)

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%) ... on Pass/Fail basis
 - (40%) ... for-credit online Exercises from weekly assignments
 - (10%) ... 1-page reaction to multimedia material / essay proposal
- 2.2. (50%) ... to be Graded
 - ♦ (40%) ... Final Exam
 - ♦ (10%) ... Term Paper

7-page (double-spaced) / based on readings to be distributed

3. Course Textbook

Hausman, Alan, Howard Kahane, & Paul Tidman *Logic and Philosophy: A Modern Introduction* (ISBN: 113305000X) Thomson/Wadsworth (current or any old edition)

4. Course Website (at Canvas)

Logon to Canvas with your Rutgers NetID and password at:

https://Canvas.rutgers.edu/portal

Select this course:

21F Logic (P)

5. Course Contents : 5-Part Composition with individual modules

Once you are in the course website, in the left column of the web page, you will find the course contents, where the four parts are arranged hierarchically and will be made available *progressively*:

- Part 1. 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

The 5-part composition of the whole course work exactly corresponds to the structure of the course website at Canvas, which will be further compartmentalized into a series of about 60 *modules*.

Each module is typically comprised of:

- 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 arranged in a (hierarchically-arranged) 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 *fully online* from 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.)

Each week, on a regular basis, a set of new modules will be opened up with (a) lectures on video, (b) reading assignments, and (c) the exercises. These modules, with the exercises therein, 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 exercises corresponding to the modules made available in the assignments are classified into of the following 2 kinds:

non-credit (NC: answers to be found in lectures)
for-credit (FC: to be graded for credit points)

The for-credit exercises (*FC*), will be considered as the *culmination* of instructional contents assigned in the week. You are required to submit your answers to these exercises (*FC*) by the due (typically via email).

The for-credit exercises will be evaluated and given credits quite liberally, almost on pass/fail basis: as long as students show their utmost efforts in absorbing new materials and coming up with answers sincerely, they will earn credit points (up to 50%, including 1-page short essay component). 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.)

7. Email Communication

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:

Logic.dr.kang@gmail.com (exclusively created for the course) (dr.steven.kang@gmail.com / secondary one for backup; not to be used otherwise)

Put the following info into the *subject line* of your email:

(P) Your Last Name, Your email contents (brief) e.g., **(P)** Smith, basic info

(P) refers to the very section of this course you're in; it shall be persistently used through the session in all the email correspondence for assignments, *in place of* the long 10-digit reference numbers for this section.

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.

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 the past experiences, your instructor is 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.