# LOGIC, REASONING AND PERSUASION

PHIL 730: 101, Section 5 Spring 2020

Instructor: Yoonhee Kang

Meeting Times: MTH 10:55 AM - 12:15 PM

Classroom: HSB 204, D/C

Email: Use Canvas Message or \_yk512@scarletmail.rutgers.edu Office Hours: Mondays 2:10 PM - 3:10 PM or by appointment

# I. Learning Objectives

Logic is the study of how to reason correctly. This course is designed to introduce a variety of logical concepts and tools of critical thinking. Based on the principles of reasoning from formal and informal logic, you will learn how to examine critically philosophical and other theoretical issues concerning the nature of reality, human experience, knowledge, value and/or cultural production.

- 1. Argument analysis: Acquiring skills of identifying parts of arguments (premises, conclusions, inferences); identifying mode (induction, deduction, analogy, etc.); reconstructing/diagramming arguments to reveal the logical structure
- 2. Argument evaluation: Becoming capable of a systematic evaluation of an argument; assessing the acceptability of premises/reasons; accurately evaluating the relevance of premises/reasons; making judgments about the sufficiency of grounds for a conclusion/contention/thesis.
- 3. Terminology/theory: Understanding and correctly using the definitions & conceptual foundations of logical analysis: validity, soundness, rhetoric, syllogisms, fallacies, other formal argument patterns.
- 4. Metacognition: Developing the skills of critical and logical thinkers such as ability to shift perspective, awareness of bias/cognitive limitations, commitment to understanding & transparency, and valuing logic over rhetoric
- 5. Application: Acquiring substantial transference of technical ability to contexts outside the classroom

# II. Required Text

Robert Arp, Jamie Carlin Watson, *Critical Thinking: An Introduction to Reasoning Well,* 2nd Edition, ISBN-13: 978-1472595683

- E-book available from www.bloomsbury.com (recommended) Amazon Kindle or Google e-book does NOT keep the page number of the physical textbook.
- Additional reading assignments will be provided via Canvas.

# III. Course Requirements and Grading

Your final grade will be determined in the following ways:

1.	Attendance	10 %
2.	Class Participation	15 %
	In-class Activities, D	viscussions
3.	Daily Assignments	15 %
4.	Quizzes & Exams	
	Quizzes	10 %
	Midterm	20 %
	Final	30 %

## Grading Scale:

A 100 - 90 B+ 89.99 - 85 B 84.99-80 C+ 79.99 - 75 C 74.99 - 70 D 69.99 - 60 F 59.99 - 0

## 1. Attendance (10 %)

You are expected to arrive <u>on time</u> and to <u>stay for the entire class</u>. Irregular attendance adversely affects your understanding of the course material and your ability to earn strong grades.

#### Policy on Attendance Grade

- · Attendance will be taken at the beginning of each class.
  - You will be allowed a <u>maximum of 2 unexcused absences</u>, after which every missed class will result in 15 points deduction from your numerical attendance grade.
  - Excused absences are only for religious holidays, serious health problems, and serious family issues. To receive an excused absence, you must provide appropriate documentation.
  - Rutgers Self-Reporting Absence Application
    If you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence.
    An email is automatically sent to me.

#### Excessive lateness will negatively affect your grade.

- You will be allowed a maximum of <u>2 lateness</u>, after which every lateness will result in 15 points deduction from your attendance grade.
- If you came late, it is your responsibility to make sure that you are counted as present.
- Lateness that exceeds 20 minutes will count as an absence.
- Leaving class early without notice will count as lateness.
- Extra Credit: 15 pt will be added to your attendance grade if you attended every class meeting on time.

## 2. Class Participation (15%)

There will be some **In-Class Activities** (e.g., group class discussion, exercise quiz, in-class writing practice, etc.) and low-stake **home assignments**. In-class activities schedule will always be notified in advance.

#### Policy on Participation Grade

- Full credits will be given to any on-time submission of in-class activities or home assignments.
- There will be NO make-up for in-class activities if you missed any of them due to unexcused absence or tardiness.
- Home assignment can be submitted late for partial credit.
- Also refer to VI. Classroom Conduct for participation grade factors.

### 3. Daily Assignments (15%)

Online Daily Assignments for (almost) <u>every</u> class meeting will help you keep track of the course very effectively. The due is 10:45 AM (10 minutes before the class begins). Daily Assignments consist of 5-10 review questions from "Getting Familiar with" practice from the textbook or lecture notes.

## Policy on Incomplete/Late/Missed Daily Assignment

- You are allowed to skip two of the daily assignments, after which there will be 15 point deduction for each missing daily assignment.
- Submission due (10:45 AM) will be strictly forced; no make-up or partial credits, no exception.
  - o "complete" and "on time" daily assignment submission → full credit (5pt each)
  - o "incomplete" or "late" submission or "non-submission" → no credit (0pt out of 5pt)
- Extra Credit (15pt to your Daily Assignment Grade) for those who submit all Daily Assignments, complete, on time

## 4. Quizzes and Exams (60 %)

**Three Quizzes** (10% of your final grade, Online, scheduled on Thursdays, February 20<sup>th</sup>, March 12<sup>th</sup>, April 23<sup>rd</sup>)

**Midterm** (20% of your final grade, Regular schedule, Thursday, April 2<sup>nd</sup>) **Final** (30% of your final grade, 8AM – 11AM, Monday, May 11<sup>th</sup>) The final exam will be accumulative but it will focus more on the material from the second half of the class.

- Policy on Missed Quizzes and Exams
  - You are responsible for making sure that the final exam does not conflict with your schedule. Double-check your schedule now.
  - NO early/make-up exams will be given <u>unless</u> you have one of the three excuses listed above.
  - Unless you contact me in advance or within 24 hours after the exam(s), you will not be allowed to take make-up exam even if you had excusable reason.

#### IV. COURSE WEBSITE & EMAIL COMMUNICATION

- 1. Please view your course website (Canvas) on a regular basis.
- Monthly reading schedule and important announcements (schedule changes, quiz notice and assignment guidelines, etc.) will be posted on Canvas.
- Canvas will also automatically update your assignment submission, grades etc.
- If you by any chance were absent and need an update on the course schedule, please check out Canvas Announcement FIRST before message/email me.
- 2. Contact me via Canvas message system ("inbox").
- 3. When you write a regular email, make sure **the "subject line" of your email** contains <u>a</u>) Your full name and b) your course name and meeting time.

Eg. "Justin Bieber\_Logic MTH10:35am\_office hour"

Eg. "Justin Timberlake\_Logic MTH 12:35pm\_Quiz"

### V. ACADEMIC INTEGRITY

Any activities that violate academic integrity will not be tolerated.

Violators are subject to the terms and conditions specific to this course as well as the fullest extent of disciplinary action that Rutgers University allows and/or recommends.

For the current academic integrity policy, visit the link: http://academicintegrity.rutgers.edu/academicintegrity-policy/

## VI. CLASSROOM CONDUCT

- 1. It is paramount that we **respect** each other.
- 2. If you arrive late or must leave early, please be discreet and minimize the disruption.
- 3. Laptops are permitted provided they are used for course purpose only.
- 4. NO distraction to others:
  - No texting, No phone ringing, No music, No social media, No online shopping, No tv streaming, No video games, etc.
  - If you are expecting an emergency call, please let me know before the start of class and sit near the door and discretely be excused to take the call.
  - NO smelly food
  - \* N.B I reserve the right to ask students to leave the class for the day or completely dis-enroll from the course for continuous disrespectful or abusive behavior toward an individual or group.

## VII. ACCOMMODATIONS -OFFICE OF DISABILITY SERVICE

For any assistance, please don't hesitate to consult with me, for more information please visit the office of disability service (https://ods.rutgers.edu)

### VIII. COURSE TOPICS AND IMPORTANT DATES

\*Schedule of readings and assignments will be offered via Canvas Announcement bi-weekly. The schedule is subject to change.

# UNIT 1 The Basics of Good Reasoning - Ch1, 2, 6 and part of Ch10 & Supplementary Readings

- a. The Basic Concepts
  - -Arguments/Non Arguments
  - -Identifying Arguments: diagramming method
  - -Necessary and Sufficient Condition
- b. Argument Analysis
  - -Deductive and Inductive Arguments
  - -Validity, Soundness, Cogency, Strength
- c. Formal and Informal Fallacies

# UNIT 2 Deductive Reasoning - Ch 3, 4, 5, 6

- a. Basic Categorical Logic
- b. Basic Propositional Logic
- c. Truth Table and Validity Test
- d. Rules of deductive Inference

## UNIT 3 Inductive Reasoning - Ch7, 8 & Supplementary Readings

- a. Probability
- b. The problem of induction
- c. Generalization, Analogy, Causation

### Application & Discussion\*

- a. Gambler's fallacy
- b. Defense of God's existence
- c. Rental Agreement
- d. Fake News
- e. Logical Puzzles

IMP	ORTANT DAT	ES				
1/27	(Monday)	Mock Daily Assignment Due				
1/30	(Thursday)	First Daily Assignment Due				
2/10	(Monday)	In-class activity I				
2/20	(Thursday)	Quiz 1 (Online, No in-class meeting) - More details will be announced. Canvas – Online Quiz 1 page will be open from 6 PM, 2/19 (Wednesday) and closed at 11: 59 PM, 2/20.				
3/12	(Thursday)	Quiz 2 (Online, No in-class meeting) - More details will be announced. Canvas – Online Quiz 2 page will be open from 6 PM, 3/11 (Wednesday) and closed at 11: 59 PM, 3/12.				
3/16 3/19	(Monday) (Thursday)	No Class (Spring Recess) No Class (Spring Recess)				
4/2	(Thursday)	<u>Midterm</u> (regular class)				
4/23	(Manday)	Quiz 3(Online, No in-class meeting)  - More details will be announced. Canvas – Online Quiz 2 page will be open from 6 PM, 4/22 (Wednesday) and closed at 11: 59 PM, 4/23.				
5/4 5/11	(Monday) (Monday)	Last Class: Final exam review Final (8 AM – 11PM)	w			
		KNOW YOUR	R GRADE			
for the Refer	e <u>number</u> of abse to the "Policies"	nces/lateness, <u>numerical</u> grades	3. Your final grade will be determined by	′		
1. Attendance 10%: My attendance grade: (/ 100)						
Number of absence (dates absent:)  Number of lateness (dates late:)  - No deduction if you have 2 or less absence and lateness, respectively.						
2. Participation 10%: My Participation grade: (/ 100)						
	In-class activity 1	(9/19) ( ) pt +	( ) pt + ( );	pt		
-		( ) pt +	( ) pt + <u>general participation</u> ( )	pt		
3. D	aily Assignme	nts 20%	My Daily Assignment grade: (/ 10	<mark>00)</mark>		
	Number of missir - No deduction	ng/late Daily Assignments if you miss 2 or less, apply -10 p	(dates you missed: pt from the 3 <sup>rd</sup> per missing/late D.A)	)		
4. Qı	<b>Jizzes and Exa</b> Quizzes 10 %		pt + Quiz2 pt + Quiz3 pt)			
	Midterm 20%	pt				
	Final 30%	pt				