

PHILOSOPHY 103 | FALL 2013 | TWF 9:10-10:00AM

INTRODUCTION TO LOGIC AND CRITICAL THINKING

INSTRUCTOR: Daniel Harris (danielwharris@gmail.com)

ABOUT THE COURSE

To reason is to make judgments on the basis of prior judgments. Good reasoning results in true judgments and bad reasoning results in false judgments. In this course we'll try to answer the following four questions:

- (1) How do humans reason?
- (2) How should we reason?
- (3) Why do we sometimes reason poorly?
- (4) How can we get better at reasoning?

The course will begin with an introduction, via Tracy Bowell and Gary Kemp's *Critical Thinking: A Concise Guide*, to some of the concepts and tools that philosophers use to distinguish good reasoning from bad reasoning. We'll then survey some historically important attempts to understand how humans reason, stretching from ancient Greece to the 20th Century, culminating with an extended look at contemporary dual process psychology through the lens of Daniel Kahneman's recent best-seller, *Thinking, Fast and Slow*. Along the way, we'll apply what we've learned to issues that arise when we reason about particular domains, such as risk assessment, statistical evidence, morality, public policy, and human behavior.

COURSE REQUIREMENTS

- Daily Quizzes — 25%
- Two In-Class Exams — 15% each
- Three Written Assignments — 15% each

QUIZZES

We'll start each class with a five minute quiz containing two or three short questions about that day's readings and/or the previous day's discussion.

These quizzes will be graded on a pass/fail basis, and they will be designed to be quite easy to pass for anyone who comes to class on time having done the readings. (If you miss class, or if you're more than a minute or two late, you'll fail that day's quiz.) I won't take up valuable class time handing back quizzes, but you can check your grade with me at any time.

The quizzes are worth 25% of your total grade, and we'll have something like 35-40 quizzes in total. Here is how I will calculate your final quiz grade out of 25:

$$\text{your grade} = 25 \times \frac{\text{number of quizzes you passed}}{\text{total number of quizzes} - 3}$$

This means that you can miss or fail up to three quizzes before it will begin to have a negative impact on your grade; after that, each quiz that you miss or fail will lower your final grade by about 0.7%. If you pass all of the quizzes, you'll get a bonus of about 2.1% on your final grade.

WRITTEN ASSIGNMENTS

Each written assignment will consist of a brief (approx. 500 words) description and diagnosis of a real-world example of bad reasoning. The example will come either from a trusted journalistic source, or from your own writing from a previous class. The first of these is due on Nov. 19, and the rest are due on Dec. 17. You'll have an opportunity to re-do any assignments handed in by Nov. 19.

EXAMS

Each exam will be made up of short answer, short essay, and quotation-identification questions. They will cover material from the readings, but also some material discussed in class which may not have been in the readings. Exams will be cumulative. The second exam will cover material from the entire semester, although the focus will be on the second half.

READINGS

Most of the following two books will be required reading:

Critical Thinking: A Concise Guide (3rd Edition)
by Tracy Bowell and Gary Kemp.
ISBN: 0-415-47183-4

Thinking, Fast and Slow
by Daniel Kahneman
ISBN: 0-374-53355-5

Kahneman's book is about \$10 on Amazon. Bowell and Kemp can be bought for about \$22 or rented for \$12 on Amazon. E-books of both are also available, and there is even an excellent audiobook of Kahneman's book (but I don't recommend relying solely on that).

COURSE OBJECTIVES

If all goes well, here's what will happen this semester:

- You'll learn to recognize arguments, their parts (premises and conclusions), and their structures.
- You'll get better at telling when arguments are strong, and you'll gain an understanding of what makes them strong.
- You'll learn to recognize and critique bad arguments, fallacies, and rhetorical ploys.
- You'll become familiar with some historically important theories about how human reasoning works, and the flaws of those theories.
- You'll become acquainted with Kahneman's dual process model of human thought, and learn to use it to explain how humans reason, and why we sometimes reason poorly.
- If time permits, you'll find out about some applications of modern psychology to specific domains of reasoning, such as reasoning about morality, public policy, and gambling.

HOW TO GET A GOOD GRADE

Getting an A in this course will require you to do the following things:

- (a) Do all of the scheduled readings in advance of each class session, and ideally a second time after class.
- (b) Regularly attend and participate in class.
- (c) Ask questions about topics you haven't yet mastered, preferably during class, but alternatively during office hours or by email.
- (d) Practice applying the concepts and theories from readings to novel situations.
- (e) Write in a clear, concise, and rationally convincing style. A good guide to this writing style is Peter Hoban's essay, 'How to Write a Philosophy Essay', which is on the website.
- (f) Talk to me about your assignment ideas, either in class or during office hours. Feel free to bring a draft of your assignment to my office hours for comments. Revise and proof-read your assignment repeatedly. Get help with this from a friend, or at the Learning Center.

ACADEMIC DISHONESTY

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

TENTATIVE SCHEDULE

	TUESDAYS	WEDNESDAYS	FRIDAYS
1		AUGUST 28TH Introduction	AUGUST 28TH Bowell and Kemp; Critical Thinking (B&K): ch.1
2	SEPTEMBER 3RD B&K: ch.2	SEPTEMBER 4TH No Class (Hunter Closed)	SEPTEMBER 6TH No Class (Hunter Closed)
3	SEPTEMBER 10TH B&K: ch.3 (pp.55-72)	SEPTEMBER 11TH B&K: ch.3 (pp.73-88)	SEPTEMBER 13TH No Class (Hunter Closed)
4	SEPTEMBER 17TH Supplemental Reading on Formal Logic	SEPTEMBER 18TH B&K: ch.4 (pp.89-103)	SEPTEMBER 20TH B&K: ch.4 (pp.104-117)
5	SEPTEMBER 24TH Supplemental Reading on Probability	SEPTEMBER 25TH Supplemental Reading on Abduction	SEPTEMBER 27TH B&K: ch.5 (pp.118-137)
6	OCTOBER 1ST B&K: ch.5 (pp.138-168)	OCTOBER 2ND B&K: ch.6 (pp.169-182)	OCTOBER 4TH B&K: ch.6 (pp.183-201)
7	OCTOBER 8TH B&K: ch.7 (pp.202-241)	OCTOBER 9TH B&K: ch.8 (pp.242-265)	OCTOBER 11TH Review
8	OCTOBER 15TH No Class (Hunter on Monday Schedule)	OCTOBER 16TH First Exam	OCTOBER 18TH Plato: Meno (excerpt)
9	OCTOBER 22ND Plato: Phaedrus (excerpt)	OCTOBER 23RD Descartes: Meditations (excerpt)	OCTOBER 25TH Hume: Enquiry (excerpt)
10	OCTOBER 29TH Dawkins: The Selfish Gene (excerpt)	OCTOBER 30TH Lehrer: How We Decide (excerpt) 99% Invisible: No Armed Bandit	NOVEMBER 1ST Dennett: Intentional Systems Theory
11	NOVEMBER 5TH Daniel Kahneman: <i>Thinking, Fast and Slow</i> (DK): Intro + ch.1 (3-30)	NOVEMBER 6TH DK: chs.2-3 (31-49)	NOVEMBER 8TH DK: chs.4-5 (50-70)
12	NOVEMBER 12TH DK: chs.6-7 (71-88)	NOVEMBER 13TH DK: chs.8-9 (89-108)	NOVEMBER 15TH DK: chs.10-11 (109-128)
13	NOVEMBER 19TH DK: chs.12-13 (129-145) First Written Assignment Due	NOVEMBER 20TH DK: chs.14-15 (146-165)	NOVEMBER 22ND DK: chs.16-17 (166-184)
14	NOVEMBER 26TH DK: ch.18 (185-195)	NOVEMBER 27TH TBA	NOVEMBER 29TH No Class (Thanksgiving)
15	DECEMBER 3RD TBA	DECEMBER 4TH TBA	DECEMBER 6TH TBA
16	DECEMBER 10TH TBA	DECEMBER 11TH Spillover, Review	DECEMBER 13TH Second Exam
	TUESDAY, DECEMBER 17TH Final Due Date for Written Assignments		