

PHIL 1000-11
Workshop in Clear Thinking
Fall 2018

Tues/Thurs, 4:15- 5:30 PM, Room MI-2038 (Meilkejohn)

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Office: SF-462 (Student and Faculty Support)

Office Hours: Tues/Thurs 6:00 – 7:00 PM (and by appointment)

Course website: <http://www.bb.csueastbay.edu>

Course description: This is an introductory course in the skill of clear (or critical) thinking. Aristotle famously defined a human being as a rational animal, but thinking rationally does not come naturally to human beings. The purpose of this course is to come to grips with this reality, while developing the skill of clear thinking in a reliable and responsible way. The course is divided into three units:

I. *Intuition & Reflection:* We begin by looking at some fascinating empirical results in psychology that reveal the challenges we face as prospective critical thinkers. The challenges suggest that we reason with two distinct operating systems: an intuitive system, which is hardwired and fast-acting, and a reflective system, which is teachable, but slow-moving (see e.g. Daniel Kahneman's *Thinking, Fast and Slow*). The reflective system cannot function without the intuitive system, but it also plays an essential role in compensating and correcting for the intuitive system's frequent errors. If you are a psychology major, this part of the course may be familiar to you.

II. *Deductive Arguments:* One of the most reliable tools the reflective system has is the deductive argument. An argument in this sense is not a dispute you have with your roommate, but a set of premises that logically entail a conclusion. Such an argument is *valid*; it is impossible for its conclusion to be false if the premises are true. Arguments are difficult to identify, so we will spend some time on this skill. We'll also examine common logical fallacies, and develop facility with the central concepts of *validity* and *soundness*.

III. *Inductive Arguments:* A deductive argument aims to give *certain* support for a given conclusion (e.g. a mathematical proof). However, much of our reasoning, including scientific reasoning, is not like that. Instead, we may have good or probable evidence for a conclusion, but not such as to guarantee its truth. Corresponding to *validity and soundness*, we'll develop the concepts of *inductive strength* and *cogency* to evaluate these kinds of arguments. We'll also look at moral reasoning.

Required Texts (available in the Bookstore or online):

Christopher Chabris & Daniel Simons, *The Invisible Gorilla* (Broadway, 2009)

ISBN: 978-0-307-45966-4

Lewis Vaughn, *The Power of Critical Thinking*, 5th edition (Oxford, 2016)

ISBN: 978-0-19-938542-3

Please get the right edition of the second text. The first is readily available in paperback at a low price, and I believe you can rent the second, if you don't wish to purchase it (\$\$).

Critical Thinking and General Education Requirement (A3):

Upon completion of your A3 requirement, you will have developed the following skills:

- Understand logic and its relation to language, elementary inductive and deductive reasoning, and formal and informal fallacies.
- Demonstrate the ability to distinguish among the different sorts of claims, such as statements of opinion, reasoned judgements, proofs, and articles of faith.
- Develop the ability to identify, analyze, evaluate, and present arguments; reason inductively and deductively; and construct arguments both to support and to refute claims.

Assessment:

5% – Course Engagement

You cannot learn if you do not participate and take ownership of your own learning. Because of this, I expect students to miss class rarely and only for good reason. Similarly, I expect you to engage in class discussion, either voluntarily or when called on. I will do what I can to make this not stressful, and I expect you will all earn 5%.

40% – Homework

Critical thinking is a skill, and skills require practice. Therefore, the largest portion of the grade is homework assignments. I will grade homework on a ‘check’ system, where a ‘check’ (10 points) indicates you mostly understood the material and made a serious effort to do the exercises well. A ‘check-minus’ (5 points) indicates that you handed something in, but didn’t understand the material well and did not make much of an effort to do the exercises. A ‘check-plus’ will be awarded a bonus score (12 points). Finally, ‘no check’ would indicate little to no effort (0 points).

10% – Reflective Writing Assignment

There will be a short (two page double-spaced) writing assignment due at the end of Part One, where I will ask you to reflect on one of the psychological challenges to critical thinking that we will have encountered. I will grade these out of 10 for a total of 10% of the overall grade. More details will be given closer to the due date.

20% – Midterm

The midterm will be at the end of Part Two and consist of definitions of key terms, multiple choice, short answer, and exercises similar to your homework assignments. Most of the emphasis will be on the material of Part Two, but will also include some central concepts from Part One. We will keep a list of these concepts from the beginning of the semester.

25% – Cumulative Final Exam

Same as above, but including material from Part Three.

Grading Schema:

A = 95-100%, A- = 90-94%, B+ = 87-89%, B = 84-86%, B- = 80-83%, C+ = 77-79%, C = 74-76%, C- = 70-73%, D+ = 67-69%, D = 60-66 %, F = 0-59%

I will, as a matter of policy, round up grades to the next letter grade if you are within 1% (e.g. 79.1 to 80%, but *not* 78.9 to 80%)

Late work policy: As a rule, work will not be accepted late except in cases of documented emergency or illness. You may make a written petition for an exception if you feel you have a compelling reason for turning work in late, but these requests must be made in advance and certainly not near the end of the semester in conjunction with a grade appeal.

Course conduct: You are expected to be respectful toward your fellow students and myself. Please refrain from using your phones (e.g. texting, email, YouTube videos, listening to music, etc.), and otherwise acting in an inappropriate or distracting way (e.g. chronic lateness, talking, sleeping, playing games, etc.). Responsible use of laptops/tablets is permitted provided it does not degenerate into any of the above. Failure to abide by the above will result in forfeiting the course engagement portion of the grade and you may be asked to leave the class.

Plagiarism: Plagiarism is a violation of University policy and seriously undermines your integrity as a student. If you are suspected of plagiarizing or cheating, and proven to have done so, you will receive an F in the course and be required to go through standard University policy, which will be unpleasant for both of us. It is your responsibility to understand the University's plagiarism policy. When in doubt, ask me. See: <https://www.csueastbay.edu/academic/academic-policies/academic-dishonesty.html>

Reasonable Accommodation: Should any student need accommodation because of a disability, please let me know to discuss options. For more information, please visit: <http://www20.csueastbay.edu/af/departments/af/as/index.html>

Subject to change proviso: Information contained in the course syllabus, other than the grade and late work and course conduct policy, may be subject to change with advanced notice, as deemed appropriate by the instructor.

Course Schedule

See below for a comprehensive overview of readings, assignments, and due dates for the semester. Please note that readings (excepting the first) and assignments are to be completed *before* the class for which they are listed, e.g. HW (homework) listed for August 30 is DUE August 30.

IG = *The Invisible Gorilla*

PCT = *The Power of Critical Thinking*

INTRODUCTION – What is Critical Thinking?

Week One – *Why It Matters and How It Works*

August 21 (Tues): Syllabus Overview and Introduction to the course, PCT, pp. 3-8

August 23 (Thurs): Identifying Claims, PCT, pp. 8-15

Week Two – *Cont.*

August 28 (Tues): Cont., HW: Exercises 1.1, #20, 21; 1.2, #2, 3, 5, 9

August 30 (Thurs): Identifying Arguments, PCT, pp. 15-20, HW: Exercises 1.4, #2, 5, 6, 11; 1.7, #4

PART ONE – Intuition and Reflection

Week Three – *The Challenge of Attention*

September 4 (Tues): “I think I would’ve seen that”, IG, Ch. 1, pp. 1-22

September 6 (Thurs): cont., pp. 22-42

Week Four – *The Challenge of Memory*

September 11 (Tues): “The Coach who choked”, IG, Ch. 2, pp. 43-61

September 13 (Thurs): cont. pp. 61-79

Week Five – *The Challenge of Knowledge*

September 18 (Tues): “Should you be more like a weather forecaster or a hedge fund manager?”

IG, Ch. 4, pp. 116-149

September 20 (Thurs): NO CLASS

Week Six – *The Challenge of Causation*

September 25 (Tues): “Jumping to Conclusions”, IG, Ch. 5, pp. 150-165

September 27 (Thurs): cont., pp. 165-184

Reflective Writing Assignment Due

PART TWO – Deductive Arguments

Week Seven – *The Basics*

October 2 (Tues): Validity and Soundness, PCT pp. 59-65 (You may also want to review pp. 8-20)

October 4 (Thurs): cont. HW: Exercise 3.1, #4, 5, 8, 10, 11, 12

Week Eight – *Evaluating Arguments*

October 9 (Tues): Judging Arguments, PCT, pp. 65-70

October 11 (Thurs): cont., HW: Exercise 3.3, #2, 4, 7, 17, 20

Week Nine – *Argument Patterns*

October 16 (Tues): Valid Forms of Argument, PCT, pp. 79-85

October 18 (Thurs): cont., HW: Exercise 3.5, #2, 3, 6, 8, 10, 12

Week Ten – *Fallacies: Irrelevant Premises*

October 23 (Tues): Genetic Fallacy, Composition, Division, Appeal to the Person, Equivocation,
Appeal to Popularity, PCT, pp. 155-161

October 25 (Thurs): Appeal to Tradition, Appeal to Ignorance, Appeal to Emotion, Red Herring, Straw
Man, Two Wrongs Make a right, PCT, pp. 162-170

HW: Exercise 5.2, #2, 4, 8, 13, 16, 18, 22

Week Eleven – *Fallacies: Unacceptable Premises*

October 30 (Tues): Begging the Question, False Dilemma, Decision-Point Fallacy, Slippery Slope,
Hasty Generalization, Faulty Analogy, PCT, pp. 170-178, Midterm Review

November 1 (Thurs): Midterm Exam

PART THREE – Inductive and Moral Arguments

Week Twelve – *Inductive Reasoning*

November 6 (Tues): Enumerative Induction, PCT, pp. 265-277 (Review PCT, pp. 59-65)

November 8 (Thurs): cont., HW: Exercise 8.1, #2, 5, 7, 11

Week Thirteen – Causal Arguments

November 13 (Tues): Causal Arguments, PCT, pp. 289-304

November 15 (Thurs): cont., HW: Exercise 8.8, #1, 4, 9, 14, 19

Week Fourteen – Thanksgiving

November 20 (Tues): THANKSGIVING BREAK NO CLASS

November 22 (Thurs): THANKSGIVING BREAK NO CLASS

Week Fifteen – Moral Arguments

November 27 (Tues): Moral Arguments, PCT, pp. 421-427

November 29 (Thurs): Moral Premises, PCT, pp. 427-429, HW: Exercise 11.2, #2, 4, 7, 10

Week Sixteen – Evaluating Moral Theories

December 4 (Tues): Moral Theories, PCT, pp. 429-438. HW: Exercise 11.4, #1, 2, 4, 5, 9

December 6 (Thurs): Review Day

FINAL EXAM: Thursday, December 13th, 5:30-7:30 PM