

PHL 1200: The Art of Thinking

Fall 2016

Carthage College

Section 01: MWF 10:30-11:35 (Lentz Hall 300)

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Office Hours: By appointment, MWF only

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Course Description

The purpose of this course is to learn to think well. As such, we'll be examining some examples of good thinking, as well as some examples of not-so-good thinking. We'll ask what separates the two, and try to train ourselves to cultivate habits of careful thought. This will involve an extended look at logic, which is the science of correct reasoning. The primary object of study in logic is the argument, and so we'll learn to recognize, assess, and construct arguments. We'll learn what makes an argument good, and we'll look at some common errors in reasoning. We will learn the difference between deductive and inductive forms of reasoning, and learn to evaluate arguments of both forms. We'll also consider what makes some arguments persuasive, and examine the role of rhetoric in critical thinking. The primary goal is to help you develop the skills to form beliefs that are rationally justified, and to recognize and evaluate claims that are not.

Required Texts

§ Required: Harry Gensler, *Introduction to Logic*, Second Edition. New York: Routledge, 2010.

All other course materials will be made available via eLearning.

Course Objectives and Assessment

By the end of the course, the student will be able to:

- (1) Describe, explain, and distinguish key concepts in critical thinking.
- (2) Identify an argument in a text, including identifying conclusions and premises, and distinguishing them from extraneous information.
- (3) Identify errors in reasoning (including formal and informal fallacies) and explain what the error in reasoning is.
- (4) Translate an argument into symbolic form and evaluate it for validity. This will include a familiarity with propositional logic and basic quantificational (predicate) logic.
- (5) Analyze specific arguments for consistency and credibility.

- (6) Evaluate evidence and draw justifiable inferences from that evidence.
- (7) Engage with peers in cogent and respectful discussion, and disagree in a reasoned and civil manner.
- (8) Apply good reasoning to issues and problems in professional and personal contexts.
- (9) Recognize and evaluate attempts at persuasion, and construct a compelling case for a position.

Attainment of objectives (1) – (4) will be assessed primarily through homework assignments and exams. Attainment of objectives (5) – (6) will be assessed primarily through homework assignments, exams, the argumentative essay, and in-class debates. Attainment of objective (7) will be assessed primarily through in-class debates. Attainment of objective (8) will be assessed primarily through the argumentative essay and in-class debates. Attainment of objective (9) will be assessed primarily through homework assignments, the argumentative essay, and in-class debates. All objectives will also be assessed via in-class participation.

Course Requirements

Course Composition:

Homework	15%
Midterm Exam	20%
Argumentative Essay	20%
Debate	15%
Final Exam	20%
Participation	10%

The grading scale is as follows:

A	94 – 100	C	73 – 76.9
A-	90 – 93.9	C-	70 – 72.9
B+	87 – 89.9	D+	67 – 69.9
B	83 – 86.9	D	63 – 66.9
B-	80 – 82.9	D-	60 – 62.9
C+	77 – 79.9	F	... – 59.9

Midterm Exam: The midterm exam will take place on **Friday, Oct. 14**. The exam will include true/false, multiple choice, short answer, and identify-the-argument questions.

Final Exam: There will be a non-comprehensive final exam on **Friday, Dec. 16 from 10:30 am - 12:30 pm**. The exam will include true/false, multiple choice, and short answer questions, as well as truth tables and logical proofs.

Homework: There will be regular homework assignments based on the exercises from the Gensler text. Occasionally, I may assign an exercise set from a different text; if I do, this will be posted as a PDF on

eLearning. All exercises will be clearly noted in the course schedule with an asterisk (see below). We will go over these in class, and you will turn them in at the end of class on the day the exercises are assigned. **Late homework assignments will not be accepted.** Each homework assignment will be assigned a percentage grade based on the number of problems, and the individual grades will be averaged for a cumulative homework score at the end of the course. Together, homework assignments will constitute **15%** of your final grade.

Argumentative Essay: The argumentative essay consists of the formulation and defense of a position on some issue. As this is a philosophy course, it would be appropriate if that issue were philosophical, but this is not necessary. You will need to identify and explain the argument or position you are responding to (whatever it is), but the bulk of the paper should be your own argumentation. This may take the form of critiquing a specific argument of an author, critiquing an entire position taken by one or more authors, critiquing an entire style of approach to a type of problem, and/or making a positive case for your own view over and against the view of one or more authors. I will provide a list of potential topics for this paper, and I encourage you to choose something that interests you. You may also write about something that is not on the list (pending my approval). You will submit the essay (PDF or Word files only) using the **Turnitin** feature on eLearning (no need to turn in a hard copy). The argumentative essay is **due Monday, Nov. 7, by 11:59 pm.**

Specifications: 2-3 pages in length, double-spaced, 12-point Times New Roman font, with 1-inch margins, correct grammar, and Chicago (or Turabian) citation.

Debate: On **Nov. 16 & 18**, we will have in-class debates. I will divide the class into teams, and assign a topic to each team. Each team will be responsible for researching the topic, and defending either an affirmative or negative position on the topic in a debate with another team. Two teams will debate each day; the teams not debating that day will serve as judges. Further details will be provided closer to debate time. The debate will be graded based on the quality of argumentation; it is irrelevant whether you agree with the position you are defending. The debate will constitute **15%** of your final grade.

Participation: Participation includes two things: 1. class involvement, and 2. an individual meeting with me outside of class. **Class involvement:** Your involvement is essential to the success of this class and to your success in this class. This means that a) active listening with the day's work present, b) open questioning, and c) creative discussion are expected of you. Note that all of these things require attendance; thus, if you miss too many classes, your grade will suffer. See below under "Attendance" for details. Class involvement constitutes **9%** of your final grade. **Individual meeting:** you are responsible for meeting with me at least once by appointment **before Nov. 18** (MWF only). This meeting may be in relation to your paper or another class assignment, but this is not necessary. A 10-15 minute chat about confusions you might have had in class or anything philosophical fulfills this requirement. Please do not procrastinate, as I cannot guarantee extra appointments towards the end of the semester. The individual meeting constitutes **1%** of your final grade.

Extra Credit: Occasionally, we will view a video or film in class to illustrate an issue or topic from the reading. If you wish, you may write up a brief (< a page, double spaced) reflection on one of these that 1.

states the main argument of the video, and 2. provides a brief evaluation of this argument (ask: is it valid?; is it sound?; is it persuasive?). You may write up to **two** of these reflections. Each reflection will be worth a maximum of **two final percentage points**. These may be turned in any time up to and including **Dec. 9**.

Grading: Grading rubrics for the argumentative essay and the debate will be posted on eLearning.

Writing: Good writing is a basic skill in any professional field, and I expect you to put in the necessary effort to make sure that your argumentative essay is lucid and well organized. A **“Tips for Writing Philosophy Papers” document will be posted on eLearning**. Please use it. If you need additional help with this, the Brainard Writing Center, located on the upper level of the Hedberg Library, offers tutoring services free of charge for the entire Carthage community. For more information, see: <https://www.carthage.edu/writing-center/>.

Attendance: Attendance is required. Your success in the course will largely depend on your grasp of the material discussed in class, and it is not possible to get the full benefit of that discussion if you are not present. In general, I will not distinguish between excused and unexcused absences (for example, in the case of illness), but if you need to be absent for some extraordinary circumstance, please notify me well in advance. I will allow a grace period of four absences before I start deducting points. 5 unexcused absences will result in the loss of 2 participation points; 6 unexcused absences will result in the loss of 4 participation points; 7 unexcused absences will result in the loss of 6 participation points. More than 7 unexcused absences will result in the loss of 9 participation points, plus an additional 4 final percentage points per absence over 8. Additionally, punctuality is expected; if you come to class late, it is your responsibility to make sure I know you are there.

Late Work Policy: Four percentage points will be deducted from the student’s assignment grade for each late day (including weekends). For example, a student who has earned 85% on a paper but who has turned it in a day late may receive a maximum of 81%.

Cell Phones and Computers: Laptops or laptop-like tablets are allowed for note-taking and in-class work. If I catch you using it for something other than in-class work, your participation grade will be lowered. Cell phones are to be off and put away for the duration of the class. Texting, or any other form of electronic communication, is strictly prohibited.

Academic Dishonesty: The Carthage College Community Code guidelines on academic dishonesty will be enforced. *Ignorance is not an excuse*. Please refer to these policies for more details or contact me with particular questions in order to avoid any problems. The College’s policies can be found online here: <https://www.carthage.edu/community-code/academic-concerns/academic-honesty-guidelines/>

More information on plagiarism can be found here: <http://www.plagiarism.org/plagiarism-101/what-is-plagiarism/>

*A useful, but not foolproof, rule of thumb: When in doubt, err on the side of over-citing.

In this course you will be required to submit written assignments in electronic form to a plagiarism detection website called Turnitin (this is done automatically via eLearning). Your assignments become a permanent part of the Turnitin database, but will not be used for any other purpose than checking for plagiarism.

Disabilities: Students with physical or learning disabilities wishing to have special accommodations should contact me as soon as possible. All discussions are confidential, and I will do anything I can to assist you. In addition, the Center for Student Success is available to assist you. They can be reached by phone at (262) 551-5802 or online here: <https://www.carthage.edu/student-success/students-with-disabilities/>.

Food and Drink: Please do everything possible to avoid bringing food into the classroom. However, in the exceptional case, choose being engaged in class while eating a snack over not eating and being unable to focus. Beverages in closed containers are welcome.

Conduct: Disagreement is a basic feature of philosophy and all other academic discourse. In this class, we will be discussing important and controversial issues. We will be engaging in discussions which challenge some of our most deeply held beliefs, and disagreement is sure to arise. For this reason, it is vital for each student, and myself, to always conduct ourselves with the utmost generosity and sensitivity toward our fellow students and our authors. I reserve the right to steer discussions in whatever way I deem most appropriate to the day's lesson, and I will not tolerate rude, disrespectful, or offensive comments. If you are unsure whether something you plan to say or do could possibly be offensive, always talk to me before sharing it with the class.

Reading: The reading for this course is difficult. Despite this, it is crucial that you keep up with the reading schedule and engage the material (especially since the lectures and all assignments are based on the readings). This means setting aside adequate time to engage the material *before class*. I have tried to keep the assigned readings to a length that allows you to wrestle with the material without getting overwhelmed. If something from the reading is unclear, you may always bring it up in class, or during office hours.

Tentative Schedule

* indicates a homework assignment.

What is Critical Thinking?		Page #	
Week 1 (9/5 - 9/9)	NO CLASS: LABOR DAY		
	Intro to Course (No Reading)		
	Moore & Parker: "Critical Thinking Basics"	1-19	
Thinking and Writing Clearly			
Week 2 (9/12 - 9/16)	Moore & Parker: "Clear Thinking, Critical Thinking, and Clear Writing" * Exercises marked with a ▲: 3-1, 3-2, 3-3, 3-4	69-92	
	(Cont.) * Exercises marked with a ▲: 3-6		
	(Cont.) * Exercises marked with a ▲: 3-7 (We'll also do exercises 3-9 & 3-13 in class)		
Arguments			
Week 3 (9/19 - 9/23)	Gensler: Ch. 1	1-6	
	Hurley: Recognizing Arguments * Exercises marked with a ★: 1.2 - I (12 problems)	14-25 25-29	
	Hurley: Recognizing Arguments (Continued) * Exercises marked with a ★: 1.2 - II (4 problems), & 1.2 - VI (4 problems) In-class Video (Extra Credit Opportunity)	30-31, 33	
Syllogistic Logic			
Week 4 (9/26 - 9/30)	Gensler: Ch. 2, Sections 2.1-2.2 (13 problems total) * Exercise 2.1a: Problems 2, 4, 6, 8 * Exercise 2.2a: Problems 2, 4 * Exercise 2.2b: Problems 2, 4, 6 * Exercise 2.2c: 2, 4, 6, 8	7-13 9 12 12 13	
	Gensler: Ch. 2, Sections 2.3-2.4 (10 problems total) * Exercise 2.3a: Problems 2, 4, 6, 8, 12 * Exercise 2.4a: Problems 2, 4, 7, 9, 12	13-20 14-15 19	
	Gensler: Ch. 2, Sections 2.5, 2.7 (12 problems total) * Exercise 2.5a: Problems 1, 2, 4, 7, 10, 17, 18 * Exercise 2.7a: 1, 3, 6, 8, 16	20-24, 28-32 22-23 30-31	
	Arguments and Fallacies		
	Week 5 (10/3 - 10/7)	Gensler: Ch. 4, Sections 4.1-4.2 (10 problems total)	55-64
		* Exercise 4.2a: Problems 2, 4, 6, 8, 12, 14, 16, 18, 22, 24	64-65

	Gensler: Ch. 4, Sections 4.3-4.5 (12 problems total) * Exercise 4.3a: Problems 2, 3, 5, 6 * Exercise 4.4a: Problems 2, 4, 6, 8, 9, 11, 13, 14	69-79 73 76	
	In-class Video (Extra Credit Opportunity)		
Inductive Reasoning			
Week 6 (10/10 - 10/14)	Review * Exercise 5.2a: Problems 1, 2, 3, 4, 6, 7, 9, 11, 13, 14	86-87	
	Gensler: Ch. 5, Sections 5.1-5.2	80-86	
	MIDTERM EXAM		
Propositional Logic			
Week 7 (10/17 - 10/21)	Gensler: Ch. 6, Sections 6.1-6.4 (17 problems total) * Exercise 6.1a: Problems 2, 4, 6, 8, 11 * Exercise 6.2a: Problems 2, 4, 6, 8, 11 * Exercise 6.3a: Problems 2, 4, 6, 8, 11 * Exercise 6.4a: Problems 2, 4	118-126 120-121 124 125 126	
	Gensler: Ch. 6, Sections 6.5-6.7 (12 problems total) * Exercise 6.5a: Problems 2, 4, 6, 8 * Exercise 6.6a: Problems 2, 4, 6, 8 * Exercise 6.7a: Problems 2, 6 * Exercise 6.7b: Problems 2, 4	126-138 128 131-132 135 135-136	
	Gensler: Ch. 6, Sections 6.8-6.12 (14 problems total) * Exercise 6.8a: Problems 2, 4, 6 * Exercise 6.9a: Problems 2, 4, 6, 8 * Exercise 6.10a: Problems 2, 4, 6 * Exercise 6.11a: Problems 2, 4 * Exercise 6.12a: Problems 2, 4	138-150 140 142 145-146 149 150	
	Propositional Proofs		
	Week 8 (10/24 - 10/28)	Gensler: Ch. 7, Section 7.1 (10 problems total) * Exercise 7.1a: Problems 2, 4, 6, 8 * Exercise 7.1b: Problems 2, 4, 8, 10, 12, 14	153-160 157 157-160
		(Continued)	
		Gensler: Ch. 7, Section 7.2 (15 problems total) * Exercise 7.2a: Problems 2, 4, 6, 8 * Exercise 7.2b: Problems 2, 4, 8, 10, 12, 15, 16, 18, 20, 24, 25	163 163-167
	Proofs (Continued) / Credibility		
	Week 9 (10/31 - 11/4)	Gensler: Ch. 7, Section 7.3-7.4 (15 problems total) * Exercise 7.3a: Problems 2, 4, 6 * Exercise 7.3b: Problems 2, 4, 5, 8, 10 * Exercise 7.4a: 2, 4, 5 * Exercise 7.4b: 2, 4, 8, 10	173 173-174 175-176 176-177
Moore & Parker: "Credibility" * Deadline to withdraw from course (for a grade of W)		105-135	

	Podcast (Extra Credit Opportunity)	
Rhetoric		
Week 10 (11/7 - 11/11)	Moore & Parker: "Credibility" (Continued) ARGUMENTATIVE ESSAY DUE	
	Moore & Parker: "Persuasion Through Rhetoric"	147-169
	Moore & Parker: "Persuasion Through Rhetoric" (Continued)	
Debates		
Week 11 (11/14 - 11/18)	In-class Debate Prep	
	DEBATE 1	
	DEBATE 2	
THANKSGIVING BREAK		
Week 12 (11/21 - 11/25)	NO CLASS	
Probability and Scientific Reasoning		
Week 13 (11/28 - 12/2)	Hurley: Statistical Reasoning (Section 9.4)	545-562
	Hurley: Hypothetical/Scientific Reasoning (Section 9.5)	567-580
	Hurley: Science and Superstition (Section 9.6)	588-605
Film		
Week 14 (12/5 - 12/9)	Hurley: Chapter 9 (Wrap-up)	
	Film	
	Film (Cont.)	
Final Exam		
Week 15 (12/12 - 12/16)	Last Day: Review	
	FINAL EXAM: Friday, 12/16, 10:30 - 12:30	