

Introduction to Critical Thinking (PHIL 109.018)

Morgan State University Spring 2023

MWF 3-350 PM Holmes Hall 113

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Course Description

Catalogue Description

3 credits 3 hours per week. This course is a study of the fundamental principles of logic, including reflective thinking. Emphasis will be given to the study of the traditional or classical forms of deductive and inductive inference and the processes of communicating, symbolizing, and defining. Constant practice in detecting fallacious reasoning will be provided.

Learning Objectives

Recognizing good reasoning is important for every field of study. It is also important in everyday life. We ought to be aware when someone is trying to dupe us with a fallacious argument. We should also be aware when someone with an opposing viewpoint has made a good argument against us. In this course, we will be studying arguments. Rather than employing arguments for or against philosophical positions, we will be concerned with the following questions: What constitutes an argument? What distinguishes a good argument from a bad one? How do we refute certain forms of arguments? What fallacies of reasoning should be avoided when constructing arguments? What does it mean for an argument to be valid or sound? What role does truth play in constructing arguments? We will answer these questions by studying logic both at an informal level and, to some degree, a formal level as well.

Course Outcomes

Students will learn how to recognize, construct, and assess various forms of arguments. In order to do so, students will learn how to paraphrase and diagram arguments. This will be done by taking a passage of text, extracting the argument from it, and organizing it according to how the premises relate to the conclusion. Students will also learn how to symbolize deductive arguments and construct proofs. Students will meet these goals by completing homework assignments and three exams.

Course Requirements & Grading

Each of the three exams will be worth 20% of the final grade, homework will be worth 20%, attendance will be worth 10%, and the final presentation will be worth 10%.

Participation

You are allowed two unexcused absences before they begin to affect your grade. Not counting the first week, we have 41 scheduled meetings. Your grade will be determined by dividing the number of times that you are in class (not counting the first week) by 39 (maximum 100%).

Grading Scale

A: 90-100 B: 80-89.9 C: 70-79.9 D: 60-69.9 F: 0-59.9

In extraordinary circumstances an incomplete grade can be granted. You have to have completed at least one assignment in order to receive an incomplete. All incompletes must be removed by the end of the next semester of enrollment following the granting of an incomplete (“I”) grade.

Course Policies

Use of Electronics

In this course you will be allowed to use your laptop or tablet to take notes or view the readings on canvas. Using an electronic device for anything outside of this will result in being marked absent for the day.

Late Work

Late assignments are penalized at a rate of three points per day late (e.g., a 90 becomes an 84 on a 2-day-late paper), up to one week. Assignments that are more than a week late will receive a zero. Deadline extensions are granted only in exceptional, documented circumstances, and at the discretion of the instructor.

Academic Integrity

Any instance of academic dishonesty will result in a failing grade on the assignment. In addition, all such instances may be reported to the student’s Dean, some of whom have indicated that they will suspend any student who commits academic dishonesty. Examples of significant academic dishonesty include non-incidental plagiarism, which is deliberately using the writings or ideas of others without proper citation, having someone other than a student complete an assignment, copying the work of another person, and cheating on a test. Students are encouraged to read the official university policy regarding academic integrity which can be found in their student handbook.

Students with Disabilities

The Office of Services for Students with Disabilities (SSD) provides and coordinates services to students with disabilities. The SSD program is designed to help ensure that students with disabilities have equal access to university programs and to help provide an environment in which they can be successful while enrolled at Morgan.

Morgan State University is committed to providing barrier-free education to individuals with disabilities and actively works to have its facilities and programs in full compliance with Section 504 of the Rehabilitation Act of 1973. Prospective or currently enrolled students who have learning, mental or physical disabilities should contact the SSD Coordinator before registering for classes. Accommodations, which may include special registration, reader services, specialized equipment, note takers, sign language interpreters, or other arrangements to aid in removing or circumventing architectural, social, or procedural barriers, may be available to assist students with disabilities.

It is the responsibility of students in need of accommodation to request an accommodation from SDSS before or at the beginning of the semester. Persons with questions may contact SDSS@morgan.edu.

Graduating Seniors

Graduating seniors must complete all of the requirements for the course and are responsible for all readings. Graduating seniors must identify themselves to the instructor well in advance of the end of the course.

Required Textbook

Kelley, David and Debby Hutchins. *The Art of Reasoning: An Introduction to Logic* 5th edition. 2021.

Reading Schedule

Week One: Course Introduction

W 1/18: Syllabus Review

F 1/20: Argument Clinic

Week Two: Argument Analysis

M 1/23: 2.1 Elements of Reasoning

W 1/25: 2.4 Deduction and Induction

F 1/27: Practice Session

Week Three: Argument Analysis

M 1/30: 2.2 Diagramming Arguments

W 2/1: Practice Session

F 2/3: **NO CLASS HOMEWORK 1 DUE (ARGUMENT ANALYSIS)**

Week Four: Fallacies

M 2/6: 3.1 Fallacies of Relevance

W 2/8: 3.2 Inductive Fallacies

F 2/10: **NO CLASS**

Week Five: Fallacies

M 2/13: 3.3 Fallacies of Presumption and Diversion

W 2/15: Practice Session

F 2/17: **EXAM ONE (ARGUMENT ANALYSIS ONLY)**

Week Six: Categorical Propositions

M 2/20: 5.1 Standard Form

W 2/22: 5.2 The Square of Opposition

F 2/24: Practice Session **HOMEWORK 2 DUE (FALLACIES)**

Week Seven: Categorical Propositions

M 2/27: 5.4 Venn Diagrams

W 3/1: 6.5 Venn Diagrams

F 3/3: Practice Session

Week Eight: Propositional Logic

M 3/6: 8.1 Connectives

W 3/8: **EXAM 2 (FALLACIES ONLY)**

F 3/10: **NO CLASS**

SPRING BREAK!!!

Week Nine: Propositional Logic

M 3/20: 8.1 Connectives **HOMEWORK 3 DUE (CATEGORICAL PROPOSITIONS)**

W 3/22: Practice Session

F 3/24: **NO CLASS**

Week Ten: Propositional Logic

M 3/27: 8.4 Formal Properties and Relationships

W 3/29: Practice Session

F 3/31: **EXAM 3 (CATEGORICAL PROPOSITIONS ONLY)**

Week Eleven: Propositional Logic

M 4/3: 8.5 Truth Table Test of Validity

W 4/5: Practice Session

F 4/7: 9.1 Rules of Implication

Week Twelve: Natural Deduction

M 4/10: 9.1 Rules of Implication **HOMEWORK 4 DUE (PROPOSITIONAL LOGIC)**

W 4/12: 9.2 Rules of Replacement

F 4/14: Practice Session

Week Thirteen: Natural Deduction

M 4/17: 9.2 Rules of Replacement

W 4/19: 9.3 Conditional Proof and Indirect Proof

F 4/21: Practice Session

Week Fourteen: Bad Arguments 1

M 4/24: Presentations **HOMEWORK 5 DUE (NATURAL DEDUCTION)**

W 4/26: Presentations

F 4/28: Presentations

Week Fifteen: Bad Arguments 2

M 5/1: Presentations

W 5/3: Presentations

F 5/5: Presentations

Week Sixteen: Bad Arguments 3

M 5/8: Presentations

W 5/10: Make the Worst Argument

F 5/12: Present/Vote on the Worst Argument