**Introduction to Logic**

**PHIL 2050.001**

 **MW 10:00-10:50**

**Instructor: Dr. Michael Thompson Term: Fall ‘25**

**Office: ENV 320e Room: WH 317 (F- BLB 140)**

**Hours: M/W 1-2:30, or by appointment email:** **Michael.Thompson@unt.edu**

**Course Description/Objectives:** Philosophy 2050 is designed to be an introduction to the methods, content, history and importance of logical reasoning. We will begin with an introduction to logic, proceed to learn informal fallacies, then move on to Aristotelian logic, and end with the syntax, semantics and translations for sentential logic. The goal of the instructor is to provide materials and guidance that fosters independent thinking about the rules and function of logic both in our everyday lives as well as in philosophical argumentation: to organize and analyze information in a cogent form; help students to understand and appreciate the complexities of rational thinking, soundness, validity, and deduction; and to encourage students to read and think critically employing techniques learned throughout the semester. There will be a significant amount of homework due every week. The format for the course will be lecture/dialogue/discussion/exercises.

**Grading:** Students will be evaluated by means of three in-class exams administered throughout the course of the semester. Daily pop quizzes will be implemented as necessary and will count as part of your participation/attendance grade. The grading scale will be as follows:

Test 1- Vocabulary of logic, Informal fallacies 30% Test 2- Aristotelian Logic 30%

Test 3- Sentential/Propositional Logic 30%

Attendance/Participation/Quizzes- 10%

Late exams and homework will not be accepted. If you know in advance expected absences for religious observances or other reasons, please make arrangements with your professor.

**The text for this class is:** A Concise Introduction to Logic, Hurley 14th Edition (13th should be fine)

**Homework** will be collected every Friday during your recitation section, and will count towards your exam grades.

**Grading policy**: This course is graded according to the requirements specified and weighted below.

 A = 90%+ B = 80-89% C = 70-79% D = 60-69% F = 0-59%

**Attendance:**

You are expected to be on time and attend every class. Attendance will be taken 5 minutes after the start time of class- if you are not present when attendance is taken, you will be counted absent for the day. Excessive absences will lower your grade. Owing to the contingencies of life, you are permitted 5 absences, after which each subsequent absence will lower your final attendance grade by one letter grade. If you are absent, there is no need for documentation explaining the absence- all absences will be treated the same (no difference between “excused” or “unexcused” absences). If you do not stay for the entirety of class, you will be counted absent.

## UNT Policies

### Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. If you are found to be engaging in academically dishonest behavior, you will fail the assignment and the course.

### ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one’s specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website](https://disability.unt.edu/) (<https://disability.unt.edu/>).

### Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

### Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

**Schedule: Readings**

**Week 1** **Chapter 1 Basic Concepts**

Aug. 18 Syllabus, Arguments

 20 Arguments, Induction vs Deduction 1.1-1.2

 22 Arguments, 1.1-1.2

**Week 2 Chapter 1 Basic Concepts**

Aug. 25 Validity, Soundness, Strength, Cogency 1.3-1.4

 27 Validity, Soundness, Strength, Cogency 1.3-1.4

 29 Validity, Soundness, Strength, Cogency 1.3-1.4

**Week 3 Chapter 3 Informal Fallacies**

Sept. 1 NO CLASS Labor Day holiday

 3 General Fallacies, Fallacies of Relevance 3.1-3.2

 5 Fallacies of Relevance 3.1-3.2

**Week 4 Chapter 3 Informal Fallacies**

Sept. 8 Fall. of Weak Ind., Presumption, Ambiguity 3.3-3.4

 10 Fallacies of Ambiguity; Illicit Transference 3.3-3.4

 12 Exam Review 3.3-3.4

**Week 5 Chapter 4 Categorical Propositions**

Sept. 15. 14 ***Exam I***

 17 Quantity, Quality, Distribution, Venn Diagrams 4.1-4.3

 19 Categorical Propositions, Venn Diagrams 4.1-4.3

**Week 6 Chapter 4 cont’d**

Sept. 22 Venn Diagrams; Square of Opposition 4.3

 24 Functions 4.4

 26 Propositions and Functions 4.3-4.5

**Week 7 Chapter 5 Categorical Syllogisms**

Sept. 29 Form, Mood, Figure, Venn Diagrams 5.1-5.2

Oct.. 1 Rules and Fallacies 5.3

 3 Categorical Syllogisms 5.1-5.3

**Week 8 Chapter 5 cont’d**

Oct.. 6 Enthymemes 5.6

 8 Sorites 5.7

 10 Exam Review

**Week 9**

Oct. 13 ***Exam II***

 15 Symbols, Translation, Truth Tables 6.1-6.2

 17 Propositional language 6.1-6.2

**Week 10 Chapter 6 Propositional Logic**

Oct. 20 Truth Tables for Propositions 6.3

22 Truth Tables for Arguments 6.4 24 Truth Tables cont’d 6.3-6.4

**Week 11 Chapter 6 cont’d**

Oct. 27 Indirect Truth Tables for Propositions 6.5

 29 Indirect Truth Tables for Arguments 6.5

 31 Indirect Truth Tables for Propositions and Arguments 6.5

**Week 12 Chapter 7 Natural Deduction**

Nov. 3 Rules of Implication I 7.1

 5 Rules of Implication II 7.2

 7 Rules of Implication 7.1-7.2

**Week 13 Chapter 7 cont’d**

Nov. 10 Rules of Replacement I 7.3

 12 Rules of Replacement II 7.4

 14 Rules of Replacement 7.3-7.4

**Week 14 Chapter 7 cont’d**

Nov. 17 Conditional Proof 7.5

 19 Indirect Proof 7.6

 21 Proof Strategies 7.5-7.6

**Week 15**

Nov. 24-28 NO CLASS Thanksgiving holiday

**Week 16 Chapter 7 cont’d**

May 2 Proving Logical Truths 7.7

 4 Catch-up/Exam Review

3 Reading day- optional recitations 7.7

**Saturday, December 6 8:00-10:00am FINAL EXAM**