#### THE UNIVERSITY OF TEXAS AT TYLER

## **Course Syllabus**

#### Fall 2025

PHIL 2303.001 (80631) - Introduction to Logic

Instructor: Robert Sloan Lee, PhD

Canvas Online Office Hours: Fridays 3:30 to 4:30 PM or by appointment

Class Times: Tuesdays & Thursdays --- 6:00 to 7:20 PM Class Location: College of Arts and Sciences - Room: 104

Class Dates: 08/25/2025 - 12/13/2025

E-Mail: rlee@uttyler.edu

Secretary Phone: 903.566.7373

## **Required Text:**

Patrick J. Hurley, A Concise Introduction to Logic (Boston, MA: Cengage, 2024)

ISBN-13: 978-0-357-79868-3 -- Link to the Class Textbook

# **Course Description**

An introduction to informal, formal, and inductive logic including fallacies, propositional logic, and scientific arguments.

#### **Course Outcomes**

Upon completion of the course, students will be able to...

- 1. articulate the basic terms, methods, and techniques of logic
- 2. understand the general scope and applications of logic
- 3. grasp the relation between logic and scientific reasoning
- 4. identify and diagnose instances of fallacious reasoning
- 5. understand the difference between inductive and deductive reasoning
- 6. assess the intellectual virtues and defects in various arguments
- 7. contrast various definitional techniques
- 8. distinguish between categorical and propositional logic
- 9. analyze some techniques employed in scientific reasoning

## **Grading Scale**

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = less than 60%

# **Grading**

80% --- Quizzes

10% --- Final Test

10% --- Attendance and Participation

## **Assessments**

**Quizzes:** Periodic in-class quizzes will be given at the beginning of the class period. The quiz average will be determined by dropping the lowest quiz grade and then dividing the sum of the quiz scores by the number of remaining quizzes. For example, if the student's quiz scores are 70, 80, & 90, then the quiz average would be 85 [that is, (80+90) divided by 2].

**Final Test**: There will be a final comprehensive test for the course composed of objective and fill-in-the-blank questions. A brief study guide will be released prior to the test.

Attendance and Participation: The attendance and participation credit awarded for any day of recorded attendance, and each day's credit is determined as an equal fraction of the total number of recorded attendance days with one free unexcused absence that does not count against the student's attendance grade. For example, if the class has met 10 days and a student has only one unexcused absence, then the student will receive full credit for attendance – with each class counting as 10% of their overall attendance grade. If the student had a second unexcused absence, then they would receive only 90 percent of the available credit for attendance. Excused absences will not count against the student's attendance and participation score, but they need to be accompanied by verifiable documentation (e.g. a doctor's note) which must be submitted when the student returns to class. Students will not see attendance points deducted in the grade book until the end of the semester. Further lack of appropriate academic engagement in the class can negatively impact a student's attendance and participation grade (e.g.,

leaving early, arriving excessively late, sleeping in class, listening to music during class, being on the phone or smartwatch during class, studying for other classes, reading for leisure during class, disruptive talking during class, and so on).

## **Course Policies**

Late Work: Quizzes and tests must be taken during the class time on the days they are given. Make-up quizzes are only allowed under special circumstances (such as a serious illness accompanied by a doctor's note).

**Communication:** The best way to communicate with the instructor is through UT Tyler e-mail (rlee@uttyler.edu). Students can expect replies within 48 hours, excluding weekends and holidays. Students who do not receive a reply within this timeframe should attempt to contact the instructor again. The instructor communicates with the class via Canvas emails and announcements. It is important that students check their email and allow notifications for class announcements.

Class Conduct: All comments and behavior must be classroom appropriate. What does "classroom appropriate" mean? It does *not* mean that students cannot express unpopular opinions. It means practicing reasoning and logical discussion. It means being civil and listening with respect. Insults, snide comments, name-calling, derogatory tones, sarcasm, ridicule, cussing, vulgarity, personal attacks, racial slurs, misogynistic remarks, etc. will not be allowed. If you are unsure about what counts as disrespectful, consult the instructor or the Golden Rule. The instructor will act as the final word on what is or is not classroom appropriate. Violators may be ejected from the class.

**Electronic Devices:** Mobile devices cannot be used in the classrooms. If you have a laptop accommodation and plan to take notes on your device, please let me know at the beginning of the semester. They are permissible if they don't distract you or your classmates from the lesson and are being employed for class purposes.

Arriving Late or Leaving Early: Arriving on time can sometimes be challenging, but it is better to be late than never. However, late arrivals and early departures can be disruptive to others in the classroom (and excessive tardiness – or leaving class early – will impact the attendance grade). For this reason, please don't make a habit of it.

**Extra Credit:** Extra credit may be available from time to time on the quizzes. Extra credit is not available upon request, especially not during the last week of class.

**Final Grade:** Grades are final once the final grade percentage has been posted in Canvas at the end of the semester. No changes will be made unless the instructor has made a mistake. Grades are not bumped up unless the student is within .5% of the next letter grade. For example, an 89.5% is an A, an 89.4% is a B, and so on. The rounding up will not be reflected in the canvas gradebook, but will be reflected in the official grade postings. No extra credit opportunities will be given during finals week. The conditions for an "incomplete" are stated in the university handbook: "(a) the student has been

making satisfactory progress in the course; (b) the student is unable to complete all course work or final exam due to unusual circumstances that are beyond personal control and are acceptable to the instructor; and (c) the student presents these reasons prior to the time that the final grade roster is due." The terms and deadline for satisfying an "incomplete" will be set by the instructor or by the head of the philosophy department.

## **Tentative Schedule of Topics**

## Unit 1: Basic Concepts of Logic

This unit explores the fundamental concepts of logic.

Upon completing this module, students will be able to articulate the basic ideas of logic (including arguments, premises, conclusions, deduction vs. induction, validity, truth, soundness, strength, cogency), understand the role of logical arguments, and identify how one employs these methods and tools.

### Unit 2: Language - Meaning and Definition

This unit explores questions related to definitions.

Upon completing this unit, students will be able to distinguish the between intension and extension – and identify and recognize various definitional techniques.

#### **Unit 3: Informal Fallacies**

This unit explores questions related to fallacies of relevance, fallacies of weak induction, and fallacies of presumption.

Upon completing this unit, students will also be able to diagnose various instances of fallacies and be able to diagnose various fallacies by articulating the ways in which mistakes in reasoning can be made.

#### **Unit 4: Categorical Propositions**

This unit explores the methods of immediate categorical reasoning.

Upon completing this module, students will be able to identify categorical statements and utilize categorical logical operators and the square of opposition to generate and evaluate immediate inferences.

#### Unit 5: Categorical Syllogisms

This unit module explores the methods of syllogistic categorical reasoning.

Upon completing this unit, students will be able identify valid and invalid categorical inferences by employing the rules for identifying such arguments, identify and construct enthymemes & sorites, and be able to construct valid categorical inferences.

### Unit 6: Propositional Logic

This unit explores the basic concepts of propositional logic.

Upon completing this unit, students will be able to symbolize and identify compound propositions as well as identify and utilize the valid propositional argument forms.

## Unit 7: Causality and Mill's Methods in Scientific Reasoning

This unit explores some of the basic methods of scientific argumentation and abductive reasoning (or inference to the best explanation)

Upon completing this unit, students will be able to recognize the relation of causation to necessary and sufficient condition, recognize and employ Mill's Five Methods (agreement, difference, the joint method of agreement & difference, the method of residues, and the method of concomitant variation). Additionally, students will be able to apply the various explanatory virtues in evaluating abductive inferences.

Final Exam: Thursday, December 11 --- 5:45 p.m.-7:45 p.m.

## **Honor Code**

## **UT TYLER HONOR CODE**

I embrace honor and integrity.

Therefore, I choose not to lie, cheat or steal, nor to accept the actions of those who do.

## **Student Resources**

**University Policies and Information** 

2025-2026 UT Tyler Course Catalogue

Fall 2025 UT Tyler Final Exam Schedule

**UT Tyler Campus Map** 

<u>UT Tyler - Fall 2022 Academic CalendarLinks to an external site.</u>