**University of North Texas**

**Logic and Critical Thinking**

**PHIL 2050**

Instructor: Hyun Yang

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Office hours: Monday, Tuesday, and Friday 12 pm-1 pm (and by appointment)

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1. **Rationale and Course Outline:**

Logic is a way of rationally expressing human thinking, a frame for analyzing the elements that makeup thinking, and serves as an objective criterion for evaluating other people's thinking. Logic is a branch of philosophy that systematizes logic academically and is an indispensable discipline for analyzing and evaluating human rational thinking. By learning logic, students can reconsider their own logical thinking, and by cultivating the ability to evaluate the logical thinking of others critically, they can diagnose various problems encountered in reality and come up with sound solutions.

**II. Course Outcomes:**

By the end of the course students should be able to demonstrate the ability to:

* accurately and fairly represent the thoughts and ideas of another
* think critically about a text or set of ideas
* clearly and compellingly communicate their own conclusions in conversation with others
* articulate what social and personal responsibility looks like in particular circumstances

**III. Course Requirements:**

1. Class attendance and participation policy:

On-time attendance is *not mandatory*. However, it is highly recommended to participate in the class to upload the discussion posts, solve the exercises, and prepare for the exams.

1. Course readings:
	* Required text: Patrick J. Hurley and Lori Watson, *A Concise Introduction to Logic,* 13th edition, Cengage Learning, 2016.
2. Assignments

 Final grades will consist of the following:

 Class participation 20% or more

 Quizzes 40%

 Two Exams 40%

Class Participation: Students get participation grades in proportion to the number of posts on the Discussion board. Too short posts (less than 50 words) cannot be counted as a part of your participation grades. A student who uploads 10 independent posts will get full participation grades. Since there is no limitation on the number of points you can earn for posting, any posts in excess of 10 will improve your final grade, even if you already get full participation grades. There is no specific document format required for the posts.

Quizzes: Students should submit their answers to exercises in the textbook. The instructor will assign homework in the class; students can submit the answer in writing by next Monday. Digital documents are not permitted unless there is enough reason why they cannot be submitted in writing.

Two Exams: Students have to take two exams before the end of the semester. Each exam comprises 20% of your course grade. Each exam consists of about 30 questions.

\*Mid-term Exam: 20 October 2023.

\*Final Exam: 11 December 2023.

**VI. Course Schedule**

August 21–25: 1.1 Arguments, Premises, and Conclusions – 1.3 Deduction and Induction

August 28–September 30: 1.4 Validity, Truth, Soundness, Strength, Cogency – 1.6 Extended Arguments

September 4 Labor Day (No class)

September 6–8: 2 Language: Meaning and Definition

September 11-15: 3.1 Fallacies in General – 3.4 Fallacies of Presumption, Ambiguity, and Illicit Transference

September 18–22: 4.1 Categorical Propositions – 4.3 Venn Diagrams and the Modern Square of Opposition

September 25–29: 4.4 Conversion, Obversion, and Contraposition – 4.6 Venn Diagrams and the Traditional Standpoint

October 2–6: 5 Categorical Syllogisms

October 9–13: 6.1 Symbols and Translation – 6.3 Truth Tables for Propositions

October 16–20: 6.4 Truth Tables for Arguments – 6.6 Argument Forms and Fallacies

October 20: Mid-term Exam

October 23–27: 7.1 Rules of Implication I – 7.4 Rules of Replacement II

October 30–November 3: 7.5 Conditional Proof – 7.7 Proving Logical Truths

November 6–10: 8.1 Symbols and Translation – 8.3 Quantifier Negation Rule

November 13–17: 8.4 Conditional and Indirect Proof – 8.7 Identity

November 20–-24: Thanksgiving Break (No class)

November 27–December 1: 8 Predicate Logic (Cont’d)

December 4–6: 10 Causality and Mill’s Methods

December 8 Reading Day (No class)

December 11: Final Exam

**VII. Academic Integrity**

Students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam. Additionally, the incident will be reported to the Dean of Students, who may impose further penalty.

According to the UNT catalog, the term "cheating" includes, but is not limited to:

1. use of any unauthorized assistance in taking quizzes, tests, or examinations;
2. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
3. the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university;
4. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or
5. any other act designed to give a student an unfair advantage.

The term "plagiarism" includes, but is not limited to:

1. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and
2. the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

**VIII. Accommodations for students with disabilities (ADA statement)**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable 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 reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at <https://studentaffairs.unt.edu/office-disability-access>. You may also contact ODA by phone at (940) 565-4323.