NAU NORTHERN ARIZONA UNIVERSITY

Course Title: PHI 103 Introduction To Logic
Term: Summer 2023
Instructor: TBA
Course Credit: 3
Mode of Instruction: Online

Course Description:

This course gives a rigorous introduction to the basic concepts of deductive and inductive logic. Providing symbolic methods for representing and assessing the logical form of arguments, students will develop an understanding of symbolic language and logic, as well as familiarity with precise models of first-order logic.

Course Prerequisites:

N/A

Learning Outcomes:

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

A. Represent the structure of statements and arguments in symbols;

B. Assess arguments for validity using truth tables and natural deduction;

C. Apply formal methods to help clarify and assess real-world arguments;

D. Display facility with the methods of symbolic logic under test conditions;

E. Defend their views about the logical structure of real-world arguments.

Course Material:

Irving M. Copi, Carl Cohen, Kenneth McMahon, ***Introduction To Logic***, 14th Edition,

Pearson, 2016.

Evaluation:

- 2 Homework [10%]
- 2 Writing Paper [20%]
- Final Presentation [15%]
- Mid-term Exam [20%]
- Final Exam [35%]

Description of the Evaluation tasks:

Assignment/ Essay/ ... : During the term, students will be required to finish several evaluation tasks within due date. All the tasks are linked with specific course topics/outcomes and will adequately assess students' competence and learning outcomes. Students are encouraged to meet with instructor about these tasks at any point.

Mid-term/ Final Exams/ Quiz/... : There may be periodic quizzes given at the beginning of lecture sessions; the feedback from these quizzes will monitor the progress of the learners and help to set learning priorities. There will be mid-term exam/ final exam for the course. They are the basic criteria for the evaluation of students' learning outcomes and final grade.

Grading Policy:

Students are supposed to finish each online lecture. Prior to each class, students should finish the required readings. During the class time, students are encouraged to make use of all relevant online course resources and communicate with the instructor. Students' grades are accumulated based on the cumulative evaluations.

Students' letter grade will be assigned according to the following scale:

A+ 90-100	A 85-89	A- 80-84
B+ 77-79	B 73-76	B- 70-72
C+ 67-69	C 63-66	C- 60-62
D+ 57-59	D 53-56	D- 50-52
F < 50		

Academic Integrity:

Students must strictly adhere to the university's academic integrity rule; and all essays, exams and any other form of academic assignments must adhere to these rules. Any form of plagiarism, cheating, or misappropriation of materials will be considered a violation of academic integrity and will be punishable by the university.

Withdrawal from the Course(s):

Students will be able to apply for a transfer or withdrawal within 3 days of the starting date of the course. If a withdrawal is applied for within 3 working days, the tuition fee will be fully refunded. After 3 days, the tuition fee will not be refunded. If a withdrawal is applied for in the first two weeks, it will be recorded as W (Withdraw) on the course transcript. After this initial two-week period, the class will be recorded as F (Fail).

Tentative Schedule:

1	Basic logic concepts
2	Analyzing arguments
3	Language and definitions
4	Fallacies **Homework#1**

5	Recognizing arguments
6	Categorical propositions
7	Categorical syllogisms
8	Syllogisms in ordinary language **Writing Paper 1**
9	Complex argumentative passage
10	Symbolic logic
11	Methods of deduction
12	**Mid-term Exam**
13	Quantification theory
14	Analogical reasoning
15	Problems in reasoning
16	Causal reasoning **Homework#2**
17	Science and hypothesis
18	Proving invalidity
19	Predicate logic
20	Disputes and ambiguity **Writing Paper 2**
21	Symbols and translation
22	Using the rules of inference
23	Quantifier negation rule
24	**Final Presentation**
25	**Final Exam**