

Wollo University
College of Engineering
Department of Architecture

Course Outline

Course Title.....Introduction to Logic/3cr.hrs./
Prerequisites.....No prerequisites
Target Group.....1st year students
Semester II.....Year 2012E.C
Lecture Times.....3 hr.
Venue.....TBA
Instructor Amanuel. D.
Consultation Hours.....TBA

Course Description

This course attempts to introduce the fundamental concepts of logic and methods of logical reasoning. The purpose of the course is to develop in learners the skills required to construct sound arguments of their own and the ability to critically evaluate the arguments of others: cultivate the habits of critical thinking and develop sensitivity to the clear and accurate use of language.

Course Objectives

Up on the successful completion of the course, students will be able to:

- ✍ Familiarize with the fundamental concepts of logic;
- ✍ Analytically introduce with fundamental methods of logical reasoning;
- ✍ Develop the skills required to construct sound arguments of their own and the ability to critically evaluate the arguments of others; and
- ✍ Cultivate the habits of critical thinking and develop sensitivity to the clear and accurate use of language.
- ✍ Develop the habit of Dialogue as well as polylogue so as to achieve mutual understanding, mutual trust and mutual respect.

Course Contents

Introduction: What Is Logic?

Chapter One: Basic Concepts of Logic. (8 Periods)

- 1.1. Argument, Premises, and Conclusions
- 1.2. Recognizing Arguments
- 1.3. Types of Arguments: Deductive and Inductive Arguments
- 1.4. Evaluating Arguments: Validity, Truth, Soundness, Strength, and Cogency

Chapter Two: Language: Meaning and Definition. (6 Periods)

- 2.1. Cognitive and Emotive Meanings.
- 2.2. The Intension and Extension of Terms.
- 2.3. Definitions and their Purposes
- 2.4. Definitional Techniques

Chapter Three: Informal Fallacies. (14 Periods)

- 3.1. Fallacies of Relevance
- 3.2. Fallacies of Weak Induction
- 3.3. Fallacies of Presumption
- 3.4. Fallacies of Ambiguity
- 3.5. Fallacies of Grammatical Analogy

Note: the periods assigned for each chapter will be subjected to minor modifications based on some situations. But, no class will be missed on the side of the instructor.

Methods and Activities

The teaching-learning methods and activities will be lectures, group discussions, intensive reading and debate based. The term paper will be given from chapter two and three of the course. There will be hot-debate and intense discussion in class. Remember that, student's active participation in class discussion and debate is highly encouraged and valued.

Mode of Assessment

The assessment modalities of this course are a combination of both continuous assessment and summative exam mechanisms. Student's evaluation through continuous assessment will account 50% of the total mark. This will be based on quizzes and an assignment. And the final exam will be out of 50%. For a given student to pass the course, it is mandatory to score minimum of 50%. Students, at the end of the course, will be graded on the basis of the total scores obtained from all those assessments modalities. Grades will be assigned on the basis of the possible distribution gaps between marks scored.

References

- ↳ Hurley, Patrick J. (1997) A Concise Introduction to Logic 6th Edition. Belmarnt: Wadsworth Publishing Company.
- ↳ Copi, Irving M. and Carl Cohen, (1990) Introduction to Logic, New York: Macmillan Publishing Company.
- ↳ Fogelin, Robert, J, (1987) Understanding Arguments: An Introduction to Informal Logic New York: Harcourt Brace Jvanovich Publisher.
- ↳ Guttenplan, Samuel: (1991) The Language of Logic Oxford: Blackwell Publishers Stephen, C. (200) The Power of Logic. London and Toronto: Mayfield Publishing Company.
- ↳ Simico, N.D and G.G James. (1983) Elementary Logic, Belmont, Ca: Wadsworth Publishing Company.