**Introduction to Logic**

Course Code: PHI 1201

**Course Unit: 3**

***Course Description:***

The course helps students to think with care and precision. Logic is concerned with the study of arguments, to determine whether they are sound or not, and it seeks to establish the conditions under which an argument may be considered acceptable.

***Course objective :***

The course aims at increasing the reasoning skills of students and capacity to formulate arguments rigorously and to analyze them critically.

***Learning objectives***

1. By the end of the course students should be able to define basic logical concepts, recognize arguments, differentiate between what is true and what is valid, and between inductive from deductive arguments.

2. Student should be able to differentiate the different functions of language, the different forms language takes, the difference between literal meanings from emotive meanings of words, between different types of agreements and disagreements.

3. The Learner should be able to differentiate the different types of deductive arguments, and also be able to extract arguments from ordinary contexts.

4. By the end of the course the students should be able to define, using relevant examples, the different kinds of definitions, apply different techniques and rules required to make a good definitions.

5. The course should enable the students, in informal contexts, identify errors in reasoning, and also isolate the different types of such errors whenever they occur.

6. The course should enable the students differentiate categorical propositions from other types of sentences used in any language, use symbols to manipulate them to determine whether they are used correctly or not in concrete situations.

7. The course should also help the students learn how to identify and use the different types of inductive reasoning in concrete situations like; making analogies, analysing causal relations, hypothesis, and probabilities.

***Course Outline***

1.0. Introduction

2.0. Language

3.0. Arguments

4.0. Definition

5.0. Fallacies

6.0. Deduction

7.0. Induction

***Methodology***

The facilitator(s) will employ the following methods; Lectures, individual presentations, textual criticism, guest lectures

***Assessment Mode***

Course work exercises 30%

End of semester examination 70%

***Reading List***

1. Barker F. Stephen, *The Elements of Logic*, 2nd. ed. McGraw-Hill, New York 1985
2. Copi M. Irving, *Introduction to logic,* 10th ed. Prentice Hall, New Jersey 1998
3. Freeman B. James, *Thinking Logically,* Prentice Hall, New Jersey 1988
4. Iseminger Gary, *An Introduction to Deductive Logic*, Meredith Corporation, New York
5. Kearns T. John, *Deductive Logic,* Meredith Corporation, New York 1969
6. Lemmon E. J., *Beginning Logic*, Chapman and Hall, London 1965
7. Quine W. V., *Philosophy of logic,* Prentice - Hall, Englewood Cliffs, New Jersey 1970
8. Sanguineti J. Jose; *Logic and Gnoseology*, UrbanianaUniversity Press, Rome 1988
9. Shaw Patrick, *Logic and its limits*, 2nd. ed. OxfordUniversity Press, Oxford 1997
10. Waller N. Bruce, *Critical thinking,* Prentice - Hall, New Jersey 1998