

Course Code: PHI 1310

W09-10 LSB C1

Course Title: Logic

Teacher: Dr. Kou Kei-chun

Teaching Language: Cantonese and English

Course description

This course is an introduction to elementary logic, focusing primarily on the syntax, semantics, and proof theory. Some elementary metatheorems of logic will also be discussed. The main objective of this course is to develop students' ability to analyze and critically evaluate arguments from a logical point of view. Students will learn the logical principles of deductive and inductive inferences and the techniques to determine the validity of arguments.

Syllabus (subject to change in details)

Chapter 1: Logic and the Method of Philosophy

Chapter 2: Basic Concepts

Chapter 3: Informal Fallacies

Chapter 4: Categorical Syllogisms

Chapter 5: Symbolic Language and Truth Table

Chapter 6: Natural Deduction in Propositional Logic

Chapter 7: Natural Deduction in Predicate Logic

Chapter 8: Induction

Chapter 9: Scientific Reasoning

Assessment

1. Tutorial participation and class discussion
2. Homework
3. Midterm and final exam

Bibliography

1. Patrick Hurley, *A Concise Introduction to Logic*, 9th ed., Wadsworth, 2006.
2. Irving Copi and Carl Cohen, *Introduction to Logic*, 11th ed., Prentice Hall, 1998
3. Brooke Noel Moore and Richard Parker, *Critical Thinking*, 8th ed., McGraw Hill, 2007.
4. Tracy Bowell and Gary Kemp, *Critical Thinking: A Concise Guide*, 2nd ed., Routledge, 2005.
5. Richard Jeffrey, *Formal Logic*, 2nd ed., McGraw Hill, 1989.
6. Paul Tomassi, *Logic*, Routledge, 1999.
7. Greg Restall, *Logic: An Introduction*, Routledge, 2006.

8. Wesley Salmon, *Logic*, Prentice Hall, 1963.
9. Jerry Cederblom and David W. Paulsen, *Critical Reasoning*, 3rd ed., Wadsworth, 1991.
10. Peter Strawson, *Introduction to Logical Theory*, Methuen, 1952.
11. Paul Tidman and Howard Kahane, *Logic and Philosophy*, 8th ed., Wadsworth, 1999.
12. Douglas N. Walton, *Informal Logic*, Cambridge University Press, 1989.
13. 林正弘，《邏輯》，三民書局，1994。
14. 李天命，《李天命的思考藝術》，明報出版社有限公司，1999。