

**Course Code: PHIL 1310**

**Course Title: Logic**

**Teacher: Dr. Kou Kei-chun**

**T03-04**

**SWH 2**

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

### **Assessment**

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

### **Bibliography**

1. Patrick Hurley, *A Concise Introduction to Logic*, 10<sup>th</sup> ed., Thomson Wadsworth, 2008.
2. Irving Copi and Carl Cohen, *Introduction to Logic*, 11<sup>th</sup> ed., Prentice Hall, 1998.
3. Brooke Noel Moore and Richard Parker, *Critical Thinking*, 9<sup>th</sup> ed., McGraw-Hill, 2009.
4. Merrie Bergmann and James Moore, *The Logic Book*, 4<sup>th</sup> ed., McGraw-Hill, 1998.
5. Alec Fisher, *The Logic of Real Arguments*, Cambridge University Press, 1988.
6. Douglas N. Walton, *The New Dialectic: Conversational Contexts of Argument*, University of Toronto Press, 1988.
7. Douglas N. Walton, *Informal Logic*, Cambridge University Press, 1989.

8. Trudy Govier, *A Practical Study of Argument*, 5<sup>th</sup> ed., Wadsworth Thomson Learning, 2001.
9. Wayne Grennan, *Informal Logic: Issues and Techniques*, McGill-Queen's University Press, 1997.
10. Richard Jeffrey, *Formal Logic*, 2<sup>nd</sup> ed., McGraw-Hill, 1989.
11. Wesley Salmon, *Logic*, Prentice Hall, 1963.
12. Peter Strawson, *Introduction to Logical Theory*, Methuen, 1952.
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。