## The Chinese University of Hong Kong Department of Philosophy

# UGED1800 Art & Methodology of Thinking 思考方法 Course Outline

### **Course overview**

The course aims to provide a basic training in critical reasoning as a methodological foundation of independent thinking. Students will learn how to extract, construct, and evaluate arguments; how to identify common fallacies and to reflect on the use of language to influence thought; and how to think critically about issues in both real life situation and theoretical arguments which they commonly encounter in the course of their studies.

## Learning outcomes

- 1. Acquire analytic skills and a critical disposition.
- 2. Grasp the basic concepts in epistemology.
- 3. Demonstrate familiarity with major proof-theoretic methods in propositional logic.
- 4. Translate arguments in ordinary language into symbolic argument forms.
- 5. Recognize common valid argument forms.
- 6. Identify, classify, and assess arguments in various contexts.
- 7. Identify and analyze informal fallacies.

### Topics

- 1. Thinking Critically: It Matters
- 2. Basic Concepts
- 3. Informal Fallacies
- 4. Logico-linguistic Analysis
- 5. Categorical Syllogisms
- 6. Propositional Logic: Natural Deduction
- 7. Assessing Truth of Premises (Epistemology)

### Learning activities and workload

#### In-class:

- 1. Lecture: 2 hours each week.
- 2. Interactive tutorial: one 2-hour session every two weeks. Students are required to discuss reading material assigned and do exercises on the following topics:

Topic of tutorial 1: Validity and Soundness;

Topic of tutorial 2: 10 Different Kinds of Informal Fallacies;

Topic of tutorial 3: Syllogisms and Venn Diagrams;

Topic of tutorial 4: Logico-linguistic Analysis;

Topic of tutorial 5: Propositional Logic and Constructing Formal Proofs;

Topic of tutorial 6: Assessing Truth of Premises (Epistemology)

### Out-of-class:

 Reading: 3–4 hours each week on lecture material.
Homework: 2 hours each week. Weeks 1–3: textbook Ex1.3–Ex1.4 (Basic Concepts); Weeks 4–5: textbook Ex3.2–Ex3.4 (Informal Fallacies); Week 6: textbook Ex4.1–Ex4.7 (Categorical Propositions); Weeks 7–9: textbook Ex5.2, Ex5.4–Ex5.5 (Categorical Syllogisms); Weeks 10–12: textbook Ex7.1–Ex7.4 (Propositional Logic: Natural Deduction); Weeks 13: *Critical Thinking: A concise guide* Ex7.2 (Epistemology).

#### Assessment scheme

Task nature	Description	Weight
Two exams: mid-term and final	Each exam is worth 35%	70%
Class participation	Class discussion	10%
Tutorial	Discussion and participation	20%

#### Remarks:

- 1. Tutorial (6 normal sessions):
  - Apart from reading material, problems with exercises and homework will be discussed.
  - Attendance is mandatory and absence will damage your grades.
- 2. Class participation
  - Grading is based on participation in discussion.

## **Recommended learning resources**

- 1. Patrick Hurley, A Concise Introduction to Logic, 11th ed., Wadsworth, 2012. (Textbook)
- 2. Brooke Noel Moore and Richard Parker, *Critical Thinking*, 10th ed., McGraw Hill, 2012.
- 3. Tracy Bowell and Gary Kemp, *Critical Thinking: a Concise Guide*, Routledge, 2010.
- 4. Irving Copi and Carl Cohen, *Introduction to Logic*, 11th ed., Prentice Hall, 1998.
- 5. Merrie Bergmann and James Moore, *The Logic Book*, 4th ed., McGraw-Hill, 1998.
- 6. Alec Fisher, *The Logic of Real Arguments*, Cambridge University Press, 1988.
- 7. Douglas N. Walton, *The New Dialectic: Conversational Contexts of Argument*, University of Toronto Press, 1988.
- 8. Douglas N. Walton, Informal Logic, Cambridge University Press, 1989.
- 9. Trudy Govier, A Practical Study of Argument, 5th ed., Wadsworth Thomson Learning, 2001.
- 10. Wayne Grennan, Informal Logic: Issues and Techniques, McGill-Queen's University Press, 1997.
- 11. Richard Jeffrey, Formal Logic, 2nd ed., McGraw-Hill, 1989.
- 12. Wesley Salmon, Logic, Prentice Hall, 1963.
- 13. Peter Strawson, Introduction to Logical Theory, Methuen, 1952.
- 14. 林正弘,《邏輯》,三民書局,1994。
- 15. 李天命,《李天命的思考藝術》,明報出版社有限公司,1999。

### Feedback for evaluation

- 1. Students are strongly encouraged to provide feedback on the course via email or meetings with lecturer or tutors.
- 2. Students evaluate the course through a survey and written comments at the end of the term as well as via regular feedback between teacher, tutors, and students. This information is highly valued and is used to revise teaching methods, tasks, and content.

Week	Topic	Requirements
1	Thinking Critically: It Matters	Major reading: textbook pp. 1–25
2–3	Basic Concepts	Major reading: textbook pp. 33-63
4	Tutorial #1	
4–6	Informal Fallacies	Major reading: textbook pp. 119–184
6	Tutorial #2	
7	Logico-linguistics Analysis	Major reading:《語理分析的思考方法》pp. 37-72
8	Tutorial #3	
8–10	Categorical Syllogisms	Major reading: textbook pp. 197–277
10	Tutorial #4	
11–12	Propositional Logic: Natural Deduction	Major reading: textbook pp. 380-419
12	Tutorial #5	
13	Assessing Truth of Premises (Epistemology)	Major reading: Critical Thinking: A concise guide pp. 261–286
13	Tutorial #6	

#### **Course schedule** (subject to adjustment)

#### **Contact details**

Lecturer	
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#### **Details of course website**

We use Blackboard Learn for this course. Lecture notes and information on tutorial assignments will be posted on the website.

#### Academic honesty and plagiarism

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at http://www.cuhk.edu.hk/policy/academichonesty/

With each assignment, students will be required to submit a signed declaration that they are aware of these policies, regulations, guidelines and procedures. For group projects, all students of the same group should be asked to sign the declaration.

For assignments in the form of a computer-generated document that is principally text-based and submitted via VeriGuide, the statement, in the form of a receipt, will be issued by the system upon students' uploading of the soft copy of the assignment. Assignments without the receipt will not be graded by teachers. Only the final version of the assignment should be submitted via VeriGuide.