**The Chinese University of Hong Kong**
**Department of Philosophy**
**UGED 1810B**
**Critical Thinking**
批判思考

# Course Outline

**Period :**    **H 9-10**

**Location :**    **ELB LT2**

## Course overview

The course aims to provide basic training in critical reasoning. It acquaints students with the methodology that serves as the foundation of independent thinking. Students will be encouraged to reflect on the use of language and its bearing on clear thinking. They will also learn how to extract, construct, and evaluate arguments; how to identify common fallacies, and how to think critically about the issues they come cross in real life and in their studies. The course will be conducted in Cantonese.

本科旨在向學生提供批判思考的基本訓練，讓獨立思考建築在方法學之上。同學將會學習如何辨識常見的謬誤和反思語言對思維的影響，如何抽取、建立和評價論證，讓他們能對生活裏的問題和學習中所遇到的理論論證作批判思考。教學語言為廣東話。

### Learning outcomes

1. Demonstrate critical skills and critical disposition.
2. Describe the essential elements of good reasoning and argumentation.
3. Identify, classify, and assess arguments in various contexts.
4. Identify and analyze fallacies.
5. Reflect on the use of language and its bearing on clear thinking.
6. Apply the principles of critical thinking to develop a systematic approach to problem solving and decision-making.

**Topics**

1. Thought, pictorial presentation and language
2. Language, inference and argumentation
3. The analysis of definition
4. Propositions and truth values
5. Premises and conclusions
6. Identifying arguments
7. Validity and Soundness
8. Evaluating deductive arguments
9. Evaluating inductive arguments
10. Linguistic analysis
11. Informal fallacies
12. Cognitive Bias

**Learning activities**

In this course, you are expected to

- read and think about the assigned readings;

- attend *all* lectures to participate in discussion.

- Finish *all* assignments and exercises

*Activities and workload:*

In-class (mandatory):

1. Lecture: 1.5 hours each week.

Out-of-class (average workload per week):

1. Readings and exercises: 1-2hours on exercises and the basic readings

2. Tests and exam: an average of 1 hour each week on preparing tests and exam throughout the term.

**Assessment scheme**

| *Task nature* | *Description* | *Weight* |
|---|---|---|
| Exam | • All topics in the course<br>• 1.5 hours | 60% |
| Tests | • On informal fallacies, evaluating arguments, categorical syllogism and inductive arguments, etc<br>• Short question, multiple choice question and true or false question<br>• Each 15-20 minutes<br>• 5 tests, each weighs 8% | 40% |

**Recommended learning resources**

Required Text:

1. Patrick Hurley, *A Concise Introduction to Logic* (Boston : Cengage Learning, 2011)

2. Joe Lau, *An introduction to critical thinking and creativity* (Hoboken, N.J. : John Wiley & Sons, 2011)

References (including all book and websites from which suggested and further readings are chosen from):

1. Alec Fisher, *The Logic of Real Arguments* (Cambridge : Cambridge University Press, 1988)

2. Douglas N. Walton, *Informal Logic* (Cambridge : Cambridge University Press,1989)

3. Trudy Govier, *A Practical Study of Argument* (Belmont: Wadsworth Pub. Co., 1991)

4. Nigel Warburton, *Thinking from A to Z* (London : Routledge, 1996)

5. Wesley Salmon, *Logic* (Englewood Cliffs. : Prentice-Hall, 1965)

6..Anthony Weston, *A Rulebook for Arguments* (Indianapolis : Hackett Pub. Co., 1992)

7. Daniel Kahneman, *Thinking, fast and slow* (London : Penguin, 2012)

8. David J. Hand, *The Improbability principle: why coincidences, miracles, and rare events happen every day* ( New York : Scientific American/Farrar, Straus and Giroux,

2014)

9. Joel Best, *Damned Lies and Statistics- Untangling Numbers from the Media, Politicians, and Activists* (Berkeley : University of California Press, 2001)

10. Graham Priest, *Logic A Very Short Introduction* (Oxford : Oxford University Press, 2000)

11. Tracy Bowell, *Critical Thinking- A Concise Guide* (London ; New York : Routledge, 2002)

12. M. Neil Browne, Stuart M. Keeley, *Asking the right questions : a guide to critical thinking* (Upper Saddle River : Prentice Hall, 1998)

13. Theodore Schick, Jr., Lewis Vaughn, *How to think about weird things : critical thinking for a New Age* (Boston : McGraw-Hill, 2005)

14. Paul Tomassi, *Logic* ( London: Routledge,1999)

15. Walter Sinnott-Armstrong, *Think again how to reason and argue* (New York: Oxford University Press 2018)

16. 李天命，《語理分析的思考方法》(香港：青年書屋，1981)

17. 貝剛毅，《思方思方導航：批判思考導論》（香港：匯智出版，2011）

**Course schedule**

| Week | Topic | Required reading | Date |
|------|-------|------------------|------|
| 1 | What is critical thinking? | Joe Lau, chapter 1 | |
| 2 | Language and Meaning | Hurley, chapter 2 | |
| 3 | Linguistic-Conceptual Analysis | 貝剛毅, chapter 1 | |
| 4 | Informal fallacies 1 | Hurley, chapter 3 | |
| 5 | Informal fallacies 2 | Hurley, chapter 3 | |

| 6 | Identifying Argument | Joe Lau, chapter 8 | |
|---|---|---|---|
| 7 | Evaluating Argument | Joe Lau, chapter 9 | |
| 8 | Categorical Propositions | Hurley, chapter 4 | |
| 9 | Categorical syllogisms | Hurley, chapter 5 | |
| 10 | Truth table for arguments | Hurley, chapter 6 | |
| 11 | Inductive Arguments: Analogy, causality and probability | Hurley, chapter 9, 10 | |
| 12 | Scientific reasoning | Hurley, chapter 13 | |
| 13 | Cognitive Bias | Joe Lau, chapter 20 | |

*For details on other suggested and further readings for each topic, see lecture notes on each topic.

**Details of course website**

Relevant announcements and course documents (e.g., lecture notes, reading/written assignments, tutorial topics and schedule, take-home examination) will be posted on BLACKBOARD.

**Contact details for teacher(s) or TA(s)**

| Professor | |
|---|---|
| Name: | Dr. Tsang Sui Ming |
| Office location: | NA |
| Telephone: | NA |
| Email: | tsm24780@yahoo.com |

**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.

**Grade Descriptor**

Please refer to

http://phil.arts.cuhk.edu.hk/~phidept/UG/Grade_descriptors.pdf