The Chinese University of Hong Kong
Department of Philosophy

2022-2023 Summer Semester
UGED1111B Logic
Course Outline

Time: Every Wednesday and Friday 11:30 – 13:15

Venue: LSK Lt4

Teacher's name: CHAN Hei Man

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Course overview:

This course is designed to develop the student's ability to analyze and critically evaluate arguments from a logical point of view. It will provide students with a basic understanding of such concepts as reasons, implication, validity, and fallacies. Students will learn the logical principles of deductive and inductive inferences and the techniques of applying them for determining the validity of arguments. Elements of good reasoning from an informal perspective will also be covered

Learning Outcomes

After completing this course, students should be able to:

1. Grasp Central Concepts in classical logic
2. Identify and Evaluate arguments
3. Analyze and identify informal fallacies in an argument
4. Translate arguments in ordinary language into symbolic argument forms.
5. Determine the validity of an argument by using truth table
6. Demonstrate familiarity with major proof-theoretic methods in propositional logic.

Topics

1. Introduction
2. Basic Concepts
3. Categorical Syllogisms
4. Symbolic Language and Truth Table
5. Natural Deduction in Propositional Logic
6. Inductive Reasoning
7. Informal Fallacies
8. Cognitive Biases

Learning activities and workload

In-class: 2 hours for each lecture Out of class: Suggested Readings and Suggested Online Exercise (1 hour)

Details of Course Website

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

Course Schedule

Date	Topic	Suggested Reading
17 May	Introduction and Basic Concepts	Major reading: textbook pp. 1–25
19 May	Basic Concepts	Major reading: textbook pp. 33–63
24 May	Categorical Syllogisms I	Major reading: textbook pp. 200–299
26 May	The Birthday of the Buddha (Public Holiday)	
31 May	Categorical Syllogisms II	Major reading: textbook pp. 200–299
2 Jun	Symbolic Language and Truth Table I	Major reading: textbook pp. 316–365
7 Jun	Symbolic Language and Truth Table II	
9 Jun	Natural Deduction in Propositional Logic	Major reading: textbook pp. 388–451
14 Jun	Mid Term Exam	
16 Jun	Natural Deduction in Propositional Logic	Major reading: textbook pp. 388–451
21 Jun	Inductive Argument	Major reading: textbook pp. 524-527 pp. 544-555
23 Jun	Informal Fallacies I	Major reading: textbook pp.119–184
28 Jun	Informal Fallacies II	Major reading: textbook pp.119–184
30 Jun	Final Exam	

Assessment Scheme

Task nature	*Description*	*Mode*	*Weight*
Class participation	In-class discussion		10%
Mid-term exam	Exam	Face-to-face	40%
Final exam	Exam	Face-to-face	50%

Recommended learning resources

1. Patrick Hurley, A Concise Introduction to Logic, 12th ed., Wadsworth, 2014. (Textbook) 2. Irving Copi and Carl Cohen, Introduction to Logic, 11th ed., Prentice Hall, 1998.

3. Lau, Joe Y. F., An Introduction to Critical Thinking and Creativity: Think More, Think Better. Hoboken, N.J: Wiley, 2011
4. Daniel Kahneman, Thinking, Fast and Slow, Macmillan, 2001
5. Merrie Bergmann and James Moore, The Logic Book, 4th ed., McGraw-Hill, 1998.
6. 李天命，《李天命的思考藝術》，明報出版社有限公司，1999。
7. 貝剛毅，2014，《思方導航（第四版）》，匯智出版。

Contact Details

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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 are 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 of The Department of Philosophy:

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