The Chinese University of Hong Kong

Department of Philosophy

2019-2020 Summer Semester

UGED1111A Logic

Course Outline

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 online lecture

Out of class: Suggested Readings (1 hour)

Suggested Online Exercise (30 minutes)

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	Required Reading
25 May	Introduction and Basic Concepts	Major reading: textbook pp. 1–25
27 May	Basic Concepts	Major reading: textbook pp. 33–63
1 June	Categorical Syllogisms I	Major reading: textbook pp. 197–293
3 June	Categorical Syllogisms II	
8 June	Symbolic Language and Truth Table I	Major reading: textbook pp. 310–357
10 June	Symbolic Language and Truth Table II	
15 June	Natural Deduction in Propositional Logic	Major reading: textbook pp. 380–441
17 June	Mid Term Exam	
22 June	Natural Deduction in Propositional Logic	Major reading: textbook pp. 380–441
24 June	Inductive Argument	Major reading: textbook pp. 509-516 pp. 529-546
29 June	Informal Fallacies and Cognitive Biases	Major reading: textbook pp.119–184
6 July	Informal Fallacies and Cognitive Biases	Reading #4 pp185-193

Assessment Scheme

Task nature	Description	Weight
Mid-term Exam	Exam	40%
Final Exam	Exam	50%
Class Participation	In-Class Discussion and Blackboard Discussion	10%

Recommended learning resources

1. Patrick Hurley, A Concise Introduction to Logic, 11th ed., Wadsworth, 2012. (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. Trudy Govier, A Practical Study of Argument, 5th ed., Wadsworth Thomson Learning, 2001.
7. Wayne Grennan, Informal Logic: Issues and Techniques, McGill-Queen's University Press, 1997.

8. 林正弘，《邏輯》，三民書局，1994。
9. 李天命，《李天命的思考藝術》，明報出版社有限公司，1999。
10. 貝剛毅，2014，《思方導航（第四版）》，匯智出版。

Contact Details

Lecturer	
Name	Chan Hei Man
Office Location	KHB 417
E-mail	Chanhm720@gmail.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 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.

Feedback for evaluation

a. Course and teaching evaluation survey will be conducted in the second last week of the course. Students are reminded of their responsibility and right to give feedback to facilitate enhancement of the course.
b. Students are welcome to give feedbacks to the course teacher at any time in person or through emails.

Grade Descriptor of The Department of Philosophy:

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