

UGED 1111B Logic 邏輯
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. The lectures will be conducted in Cantonese. English and Chinese reading materials are included.

本科提供基本的邏輯學訓練，培養學生的邏輯思辨及提升其分析和評鑑各類論證的能力。除了邏輯學的基本概念外（例如：理由、涵蘊、對確、謬誤等），本科主要教授演繹推論和歸納推論的邏輯原則及其應用的方法，並討論非形式邏輯的推理原則。廣州話授課，參考資料包括英語和中文著作。

Learning outcomes

1. Acquire analytic skills and a critical disposition.
2. Describe the essential elements of good reasoning and argumentation.
3. Demonstrate familiarity with major proof methods in propositional and predicate 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. Language and Thought
2. What is an argument?
3. Categorical Syllogisms
4. Symbolic Language and Truth Table
5. Natural Deduction in Propositional Logic
6. Natural Deduction in Predicate Logic Informal Fallacies
7. Informal Fallacies

Learning activities and workload

In-class:

Lecture: 2 hours each week.

Out-of[-class:

Reading: 3–4 hours each week on lecture material and selected book chapters.

Assessment scheme

<i>Task nature</i>	<i>Weight</i>
Two exams: mid-term and final	Each exam is worth 45%
Class participation	10%

Recommended learning resources

1. Patrick Hurley, *A Concise Introduction to Logic*, 10th ed., Wadsworth, 2006. (**Textbook**)
2. Irving Copi and Carl Cohen, *Introduction to Logic*, 9th ed., Prentice Hall, 1994.
3. Merrie Bergmann and James Moore, *The Logic Book*, 4th ed., McGraw-Hill, 1998.
4. Alec Fisher, *The Logic of Real Arguments*, Cambridge University Press, 1988.
5. Douglas N. Walton, *The New Dialectic: Conversational Contexts of Argument*, University of Toronto Press, 1988.
6. Douglas N. Walton, *Informal Logic*, Cambridge University Press, 1989.
7. Trudy Govier, *A Practical Study of Argument*, 5th ed., Wadsworth Thomson Learning, 2001.
8. Wayne Grennan, *Informal Logic: Issues and Techniques*, McGill-Queen's University Press, 1997.
9. Richard Jeffrey, *Formal Logic*, 2nd ed., McGraw-Hill, 1989.
10. Wesley Salmon, *Logic*, Prentice Hall, 1963.
11. Peter Strawson, *Introduction to Logical Theory*, Methuen, 1952.
12. 林正弘，〈邏輯〉，三民書局，1994。
13. 李天命，〈李天命的思考藝術〉，明報出版社有限公司，1999。
14. 〈邏輯導論〉(香港：香港公開大學出版社，2000) [Copi 原著]

Feedback for evaluation

Students evaluate the course through a survey and written comments at the end of the term as well as via regular feedback between teacher and students.

Course schedule

<i>Week</i>	<i>Topic</i>	<i>Activities</i>
1	Language and Thought	Reading: Lecture Notes: Chapter 1; Copi [1994]:Chapter 1-2
2–3	What is an argument?	Reading Lecture Notes: Chapter 2-3; Copi [1994]:Chapter 1-2
4	Evaluating deductive and inductive arguments	Reading Lecture Notes: Chapter 3
5–6	Categorical Syllogisms	Reading: Lecture Notes : Chapter 5; Copi [1994]:Chapter 6
7-8	Symbolic Language and Truth Table	Reading: Lecture Notes: Chapter 6; Copi [1994]:Chapter 8
9–10	Natural Deduction in Propositional Logic	Reading: Lecture Notes: Chapter 6; Copi [1994]:Chapter 9
11–12	Natural Deduction in Predicate Logic	Reading: Lecture Notes: Chapter 7; Copi [1994]:Chapter 10
13	Informal Fallacies	Reading Lecture Notes: Chapter 4

Contact details

Instructor	
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Details of course website

We use e-learning system for this course. Lecture notes and information on tests and examinations 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.