The Chinese University of Hong Kong
Department of Philosophy

UGED1111A Logic 邏輯
Course Outline

Course overview

本課教授邏輯的目標有二：

一、 本課旨於讓同學學懂區分好的理由和壞的理由，從而學懂以更好的理由去支持自己的結論，也學懂怎樣去評價別人的說法，最後建立到以慎思明辨的態度去面對自己和別人說法的習慣。而為了達到這目標，本課會教授基本的邏輯概念，讓同學能用以評價不同論證，也會教授一些主要的證明系統，讓同學能用來分析複雜的論證。

二、 本課亦旨於讓同學對本課教授的證明系統之特性有些簡單了解，也淺嘗一下一些有趣的基礎邏輯哲學。所以本課也有小部份會教授一些簡單的後設邏輯和邏輯哲學。

This course has two aims:

1. Students will learn how to distinguish between good reasons and bad reasons, so that they learn how to use better reasoning to support their conclusion and how to evaluate the arguments of others. By the end of the course, students are expected to habitually adopt a critical position towards the arguments of others' and their own. In order to achieve this aim, students will be taught basic logical concepts to evaluate different types of arguments. Some major proof systems will also be taught, so that they can be used to analyse complicated arguments.

2. Students will also learn some basic properties of the proof systems taught in the course. They will also have a chance to have a taste of some simple philosophy of logic. So a small part of the course will cover some simple meta-logic and philosophy of logic.

Learning outcomes

After completing this course, students should be able to:

1. Use basic logical concepts to evaluate deductive and inductive arguments

2. Analyse and identify some common formal, informal and probability fallacies

3. Understanding common cognitive biases in our cognitive system

4. Translate sentences in natural languages into formal language

5. Determine the validity of an argument by using truth table

6. Conduct simple proof in common proof systems (both propositional and predicate logic)

Learning activities and workload

In-class:

1. Lecture: 4 hours each week.

Out-of-class:

1. Revision: lecture material (2 hours)

2. Suggested exercises (1 hours)

   Suggested exercises are assigned. Students are expected to complete them before the next lecture.

3. Online discussion (3 hours)

   Students are encouraged to raise questions and discuss on an online platform. The lecturer will also post some questions for the students to discuss on a regular basis.

Assessment scheme

Task nature	*Weight*
Mid-term exam (Take-home)	45%
Final exam (Take-home)	50%
Class and online discussion	5%

Recommended learning resources

1. Graham Priest, *Logic: A Very Short Introduction*, 2nd ed., Oxford University Press, 2017.

2. Patrick Hurley, *A Concise Introduction to Logic*, 13th ed., Wadsworth, 2018.

3. Alan Hausman & Howard Kahane & Paul Tidman, *Logic and Philosophy: A Modern Introduction*, 12nd ed., Cengage Learning, 2012.

4. Raymond Smullyan, *Logical Labyrinths*, A K Peters/CRC Press, 2008.

5. Brian Skyrms, *Choice and Chance*, 4th ed., Cengage Learning, 1999.

6. Joe Y. F, Lau. *An Introduction to Critical Thinking and Creativity: Think More, Think Better*. Wiley, 2011

7. Douglas N. Walton, *The New Dialectic: Conversational Contexts of Argument*, University of Toronto Press, 1988.

8. Douglas N. Walton, *Informal Logic: A Pragmatic Approach*, Cambridge University Press, 1989.

9. Irving Copi and Carl Cohen, *Introduction to Logic*, 11th ed., Prentice Hall, 1998.

10. Ian Hacking, *An Introduction to Probability and Inductive Logic*, Cambridge University Press, 2001.

11. Merrie Bergmann and James Moore, *The Logic Book*, 4th ed., McGraw-Hill, 1998.

12. Alec Fisher, *The Logic of Real Arguments*, Cambridge University Press, 1988.

13. Trudy Govier, *A Practical Study of Argument*, 5th ed., Wadsworth Thomson Learning, 2001.

14. Wayne Grennan, *Informal Logic: Issues and Techniques*, McGill-Queen's University Press, 1997.

15. Richard Jeffrey, *Formal Logic*, 2nd ed., McGraw-Hill, 1989.

16. Wesley Salmon, *Logic*, Prentice Hall, 1963.

17. Peter Strawson, *Introduction to Logical Theory*, Methuen, 1952.

18. 林正弘，《邏輯》，三民書局，1994。

19. 李天命，《李天命的思考藝術》，明報出版社有限公司，1999。

20. 貝剛毅，2014，《思方導航（第四版）》，匯智出版。

Feedback for evaluation

1. Students are strongly encouraged to provide feedback on the course via email or meetings with lecturer.

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 and students. This information is highly valued and is used to revise teaching methods, tasks, and content.

Contact details

Lecturer	
Name:	YEUNG Chun Yin 楊俊賢
Email:	salt.yeung@tutanota.com

Details of course website

We use Blackboard Learn for this course. Lecture notes and information on assignments 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.

Grade Descriptor of The Department of Philosophy:
http://phil.arts.cuhk.edu.hk/~phidept/UG/Grade_descriptors.pdf