The Chinese University of Hong Kong
Department of Philosophy

UGED1111I Logic

Course Code/Section: UGED1111/Section I	Year: 2022-22 Term 2	
Course Title: Logic		
Time/Venue: Thursday 12:30-14:15/LHC 104	Course website: TBA	
Course Teacher: ZHANG Jiji	Email: TBA	Phone: TBA
Office Location: TBA	Office Hours: TBA	

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:

1. Acquire analytic skills and a critical disposition.
2. Grasp the central concepts in classical logic.
3. Demonstrate familiarity with major proof-theoretic 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.

Learning Activities:

1. Interactive lectures
2. In-class quizzes
3. Weekly problem sets for exercise
4. Reading assignments and homework

Weekly Course Schedule and reading assignment:

Week/Date	Topic	Required readings/other requirements
1. 12 January	Overview	Salmon, chap 1, sec I (pp. 2-7)
2. 19 January	Argument analysis	Salmon, chap 1, sec II-V (pp. 11-31)
3. 2 February	Deductive vs. Inductive arguments	Salmon, chap 3 (pp. 78-96)
4. 9 February	Propositional logic I: formal language and truth function	Hurley, chap 6, sec 1-2 (pp. 310-332)
5. 16 February	Propositional logic II: truth table methods	Hurley, chap 6, sec 4-6 (pp. 340-370)
6. 23 February	Propositional logic III: natural deduction	Lecture notes on natural deduction for propositional logic (about 12 pages)
7. 2 March	Midterm exam	A 90-minute exam (during which students are allowed to consult one sheet of notes)
8. 16 March	Categorical syllogisms	Hurley, chap 5, sec 1-2 (pp. 259-279)
9. 23 March	Predicate logic I: formal language	Hurley, chap 8, sec 1 (pp. 442-449)
10. 30 March	Predicate logic II: models and validity	Lecture notes on the standard semantics for predicate logic (about 12 pages)
11. 6 April	Predicate logic III: natural deduction	Lecture notes on natural deduction for predicate logic (about 12 pages)
12. 13 April	Inductive arguments	Excerpts from Salmon, chap 4 (about 25 pages)
13. 20 April	Informal fallacies	Excerpts from Hurley, chap 3 (about 25 pages)

Required readings and other recommended readings/ learning resources:

Required readings come from the following textbooks:

Patrick Hurley, *A Concise Introduction to Logic*, 11th ed., Wadsworth, 2012.
Merrilee H. Salmon, *Introduction to Logic and Critical Thinking*, 6th ed., Wadsworth, 2013.
Jiji Zhang, *Lecture notes on propositional and predicate logic*, manuscript.

Recommended references:

Gary Hardegree, *Symbolic Logic: A First Course*. http://courses.umass.edu/phil110-gmh/text.htm
Joe. Y. F. Liu, *An Introduction to Critical Thinking and Creativity*, John Wiley & Sons, 2011.
(Companion online course: http://philosophy.hku.hk/think/)
Paul Teller, *A Modern Formal Logic Primer*. http://tellerprimer.ucdavis.edu
Douglas N. Walton, *Informal Logic*, Cambridge University Press, 1989.
林正弘，《邏輯》，三民書局，1994。
李天命，《李天命的思考藝術》，明報出版社有限公司，1999。

Assessment scheme:

Assessment component	Description	Weight (%)
In-class quizzes	Simple one-question quizzes to encourage class participation	15%
Two assignments	One before the midterm and one before the final in preparation for the exams	20%
Midterm exam	90-minute in-class exam (on 2 March)	30%
Final exam	120-minute exam (date and venue TBA)	35%

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