

Course Outline (General Education)

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| Course Code/Section: UGED1111H | Year: 2023-24 Term 2 |
| Course Title: Logic | |
| Time/Venue: Tue 14:30-16:15/NAH 11 | |
| Course Teacher: Lo, Tien-Chun | Email: tien-chunlo@cuhk.edu.hk |
| Office Location: room 428, Fung King Hey Building | |

Course overview: *(as per the course description approved by Senate Committee on GE)*
 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 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: *(based on the learning outcomes approved by Senate Committee on GE)*
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: *(as per the learning activities approved by Senate Committee on GE)*
1. Lecture: 2 hours a week
 2. Reading: 2-3 hours for the weekly required reading
 3. Assignment: Two assignments that help students review the content of the course will be given before midterm/final exams. Students are expected to spend 3-5 hours on each of them.

Weekly Course Schedule and reading assignment:

| Week/Date | Topic | Required readings/other requirements |
|--------------------|-------------------------------------|---|
| 1. 9 Jan | Introduction | |
| 2. 16 Jan | Basic concepts | Hurley, pp. 1-5; 14-25; 44-47 |
| 3. 23 Jan | Propositional Logic: Language | Hurley, pp. 310-319; 323-332 |
| 4. 30 Jan | Propositional Logic: Truth Table I | Hurley, pp. 335-341; 344-347 *Assignment#1 will be given after this class. |
| 5. 6 Feb | Propositional Logic: Truth Table II | Hurley, pp. 350-358 *Tentative Deadline for Assignment#1 |
| No Class 13 Feb | Lunar New Year | |

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|-------------------|---|---|
| 6. 20 Feb | Propositional Logic: Argument Forms | Hurley, pp. 360-371 |
| 7. 27 Feb | Propositional Logic: Natural Deduction I | Hurley, pp. 380-386; 391-396 |
| No Class 5 Mar | Reading week | |
| 8. 12 Mar | Midterm exam | Scope: Week 1-6 |
| 9. 19 Mar | Propositional Logic: Natural Deduction II | Hurley, pp. 401-407; 414-419; 427-430; 432-436; 438-440 *Assignment#2 will be given after today's class. |
| 10. 26 March | Predicate Logic: Language | Hurley, pp. 442-449 *Tentative Deadline for Assignment#2 |
| 11. 2 Apr | Predicate Logic: Natural Deduction I | Hurley, pp. 451-460 |
| 12. 9 Apr | Predicate Logic: Natural Deduction II | Hurley, pp. 451-460 |
| 13. 16 April | Revision Class | |

Required readings and other recommended readings/ learning resources:

1. Patrick Hurley, *A Concise Introduction to Logic*, 11th ed., Wadsworth, 2012. (Main Textbook) *Also notice that although the 12th edition (the latest one) has been published, we will still use the 11th edition so that all the page numbers indicated will follow the 11th instead of the 12th edition.
2. Irving Copi and Carl Cohen, *Introduction to Logic*, 11th ed., Prentice Hall, 1998.
3. Merrie Bergmann and James Moore, *The Logic Book*, 4th ed., McGraw-Hill, 1998.
4. Volker Halbach, *The Logic Manual*, Oxford University Press, 2010.
5. 彭孟堯，《基礎邏輯》，第二版，學富文化，2012。

Assessment scheme:

| Assessment component | Description | Weight (%) |
|----------------------|-------------|------------|
| Class participation | | 10 |
| Assignment#1 | | 5 |
| Assignment#2 | | 5 |
| Midterm exam | | 30 |
| Final exam | | 50 |

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/academic_honesty/ .

With each assignment, students are required to submit a [signed declaration](#) (attachment 1) 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 in you course outline