

**Division of Humanities**  
**Course Syllabus**  
**Logic**

**Course Title:** Logic  
**Course Code:** HUMA 1720  
**Course Offered in:** Spring 2017  
**Course Instructor:** Dr. Nahum Brown  
**Class Schedule:** Mondays and Wednesdays, 12:00- 1:20 PM  
**Classroom:** 2464 (lifts 25-26)  
**Office Hours:** Wednesdays 1:30- 3:30 (by appointment)  
**Office:** 3334  
**Prof. Email:** hmnahumbrown@ust.hk  
**Teaching Assistant** TAN Nan  
**TA Email:** ntanaa@connect.ust.hk

**Course Description:**

This course offers an introduction to the basic concepts of critical thinking and propositional logic. The aim is to present students with a balanced survey of inductive (content) and deductive (formal) kinds of arguments. Students will learn about the advantages and disadvantages of each kind of argumentation, thereby gaining a more comprehensive vision of the capacities and limitations of rationality in general. The course begins with a discussion of the fundamental principles of argument analysis. Students learn how to distinguish between premises and conclusions, how to recognize arguments from non-arguments, and also gain tools for assessing the strength and cogency of arguments in our everyday language. Students also learn how to identify and fix both formal and informal fallacies. Propositional logic will take up the last third of the course. Students will become acquainted with truth tables and natural deduction, and will practice translating from natural language into symbolic notation. Throughout the course, emphasis will be placed on the application of logic within our everyday lives, helping students to develop clear thinking skills, while exploring the usefulness of logic for philosophy and theoretical subjects generally.

**Required Reading:**

Patrick J. Hurley, *A Concise Introduction to Logic*, Twelfth Edition

**Course Outline:**

<b>Class</b>	<b>Date</b>	
<b>1</b>	Feb 1	Introduction to the course
<b>2</b>	Feb 6	<b>Basic Concepts of Informal Logic:</b> Chapter 1.1: Arguments, Premises, and Conclusions

**Division of Humanities**  
**Course Syllabus**  
**Logic**

<b>3</b>	Feb 8	Chapter 1.2: Recognizing Arguments
<b>4</b>	Feb 13	Chapter 1.2: Recognizing Arguments; Chapter 1.3: Deduction and Induction
<b>5</b>	Feb 15	Chapter 1.3: Deduction and Induction
<b>6</b>	Feb 20	Chapter 1.4: Validity, Truth, Soundness, Strength, Cogency
<b>7</b>	Feb 22	Chapter 1.4: Validity, Truth, Soundness, Strength, Cogency
<b>8</b>	Feb 27	Chapter 1.5: Argument forms: Proving Invalidity
<b>9</b>	Mar 1	Quiz 1: Basic Concepts of Informal Logic
<b>10</b>	Mar 6	<b>Informal Fallacies:</b> Chapter 3.1: Fallacies in General; Chapter 3.2: Fallacies of Relevance
<b>11</b>	Mar 8	Chapter 3.2: Fallacies of Relevance
<b>12</b>	Mar 13	Chapter 3.3: Fallacies of Weak Induction
<b>13</b>	Mar 15	Chapter 3.3: Fallacies of Weak Induction; Chapter 3.4: Fallacies of Presumption, Ambiguity, and Illicit Transference
<b>14</b>	Mar 20	Chapter 3.4: Fallacies of Presumption, Ambiguity, and Illicit Transference
<b>15</b>	Mar 22	Quiz 2: Informal Fallacies
<b>16</b>	Mar 27	<b>Propositional Logic:</b> 6.1: Symbols and Translation
<b>17</b>	Mar 29	6.2: Truth Functions

**Division of Humanities  
Course Syllabus  
Logic**

<b>18</b>	Apr 3	6.2: Truth Functions
<b>19</b>	Apr 5	6.3: Truth Tables for Propositions
<b>20</b>	Apr 10	6.4: Truth Tables for Arguments
<b>21</b>	Apr 12	<b>No Class: Mid-Term break</b>
<b>22</b>	Apr 17	<b>No Class: Mid-Term break</b>
<b>23</b>	Apr 19	6.5 Indirect Truth Tables
<b>24</b>	Apr 24	<b>CLASS CANCELED</b>
<b>25</b>	Apr 26	7.1 Rules of Implication I
<b>26</b>	May 1	<b>No Class: Labor Day</b>
<b>27</b>	May 3	<b>No Class: the Birthday of the Buddha</b>
<b>28</b>	May 8	7.2. Rules of Implication II
<b>29</b>	May 10	Make up class: 8.1: Symbols and Translation

**Assignments:**

Attendance:	9% (0.5% x 18 classes)
Weekly assignments	17% (1% x 17 out of 18 assignments)
Quizzes	42% (Quiz 1: 22%; Quiz 2: 20%)
Final Exam	32%

**Attendance and Lateness Policy**

**Division of Humanities**  
**Course Syllabus**  
**Logic**

Students are expected to attend classes regularly and on time. Attendance will be checked only at the beginning of class. Missing one or more classes makes it increasingly difficult to keep up with the material. Attendance and punctuality will affect your grade (cf. course evaluation). As a general rule, there will not be any make-up quizzes or assignments.

**Academic Honesty**

Plagiarism and cheating of any kind will not be tolerated. Any evidence of plagiarism will result in immediate failure of the assignment or exam. I also reserve the right to take further appropriate steps, including consultation with the dean and the possibility of expulsion from the University.

**Upon completion of this course, students are expected to be able to:**

	Course ILOs
1	Paraphrase the logical definition of argument.
2	Distinguish valid from invalid arguments and translate sentences of ordinary language into the formal language of logic.
3	Explain in their own words important logical terminology such as valid, invalid, sound, unsound, consistent, inconsistent, contingent, necessary, theorem, tautology.
4	Use logical methods to elaborate correct reasoning, construct proofs in formal systems for sentential logic and syllogism, and use semantic methods (truth tables, counter-models) to test for validity and related properties.
5	Examine some of the sophisticated and interesting problems in philosophy through some paradigm examples.