

# **Critical Thinking (UGD181AD)**

**2009/10 Second Semester**

Lecture Hours : Monday 2:30 pm - 4:15 pm  
Classroom : MMW 703  
Lecturer : Dr. Wan Shun Chuen (Philosophy Department)  
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## **Course Objectives and Learning Outcomes:**

The objectives of this course are:

- To introduce some key issues in critical thinking.
- To demonstrate some of the basic concepts and principles necessary to examine arguments.

At the end of the course students should be able to:

- Familiarize with some central issues in critical thinking.
- Identify and explain different concepts, principles and models.
- Assess the strength and weaknesses of arguments.

## **Key Teaching and Learning Activities:**

- Lectures
- Readings
- Take-home exercise
- Film shows
- Quiz

## **Course Schedule:**

Please note that this is only a rough guide and I will adjust the details accordingly while we proceed.

### **Week 3 (Jan 25) is our first lesson**

#### **Course orientation and some basics of critical thinking**

What will this course offer and what will this course **not** offer?

What is the difference between critical thinking and other human capabilities, e.g. feelings or sensations? Why is critical thinking important to us?

Note: All course material—handouts, syllabus, etc.—will be available from, or announced in, WebCT. You should go there regularly to check the updated information.

#### **I will also start with linguistic analysis this lesson**

The human thinking process is predominantly based on language, therefore we need to analyze first how we understand language. For instance, before we say whether or not a sentence is true, we need to find out what the sentence means. But how do we grasp the meaning of a sentence?

### **Week 4 (Feb 1)**

To continue with our discussion of the significance of language in critical thinking

### **Week 5 (Feb 8)**

#### **Truth**

We usually accept a sentence because it is true. And we use only true beliefs as a foundation for other beliefs. But what is the truth of a sentence? I will introduce a useful distinction here: analytic and synthetic.

**Note that February 15 is a public holiday.**

### **Week 6 and 7 (Feb 22 and March 1)**

#### **Deduction**

The basic unit of critical thinking is an argument. What is an argument? In this week, I will introduce deductive logic and focus on a few key concepts in deduction, namely validity, soundness, sufficient condition and necessary condition.

I will also introduce how to apply Venn diagrams in determining validity.

### **Week 8 (March 8)**

A brief revision of what we have taught so far.

Note that we will have our mid-term quiz next week, which is also the deadline of your homework.

## **Week 9 and 10 (March 15, 22)**

### **Induction**

I will introduce this week and the following one another form of argument, namely induction, which is the foundation of scientific reasoning. Which factors make an induction a good one? And what is the basic difference between deduction and induction? Again, if time permits, I will talk about some other issues in scientific reasoning.

We will have our first quiz in week 9, which is also the deadline of your homework.

## **Week 11 (March 29)**

### **Knowledge**

A key purpose of engaging in critical thinking is that it could lead to knowledge. But when we claim that we know something, what does it mean? What are the basic criteria of knowledge? In other words, how can we distinguish between knowledge and non-knowledge, like opinion or rumour?

**Note that April 5 is a public holiday.**

## **Week 12, 13 (April 12, 19)**

### **Fallacies**

People may come up with bad arguments, sometimes they are just careless, but in some cases they put forward logically bad arguments in order to cheat. I will discuss some key fallacies so that you could spot them easily.

## References

The following is a PRELIMINARY listing of books you may wish to consult if you like. And all of them are available in our library. But I must emphasize that they are NOT textbooks for this course. More specific readings will be given out during the lectures.

Priest, Graham (2001) *Logic: A Very Short Introduction*, New York: Oxford University Press.  
Weston, Anthony (2001) *Rulebook for Arguments*, Third Edition, Hackett Publishing Company.

These two are really short (less than 100 pages) and easy to read (non-technical) and I highly recommend them. In case you want to learn more you can consult one of the followings, which may be a bit difficult:

Baker, S. (2003) *The Elements of Logic*, 6th/edn, McGraw Hill.  
Baron, J. (2000) *Thinking and Deciding*, Cambridge University Press.  
Copi, I. and Cohen, C. *Introduction to Logic*, Prentice Hall. (various editions)  
Govier, T. (1997) *A Practical Study of Argument*, Wadsworth.

Moreover, you are most welcome to have a word with me anytime if you want to explore further than what I have suggested. For Chinese readings, I would recommend:

殷海光 (2006) 《思想的顏色》，香港：商務印書館。  
李天命《李天命的思考藝術》，香港：明報出版社。（不同年份版本）  
葉保強、余錦波 (1993) 《思考與理性思考》香港：商務印書館。  
陳波《邏輯學是什麼》（不同年份版本）

## Assessment Activities:

Type of assessment	Weighting
Mid-term Quiz	25%
Take-home exercise	25% (to be handed in on the same date as the mid-term quiz)
Examination	50%

**Note:** If you miss any of the assessment activities, there will be no make-up quiz or exam. Handing in homework after the deadline will have five marks deducted per day being late.