

### ***Goals of the course***

Society is awash with weird and wonderful theories, ideas and practices: homeopathy, astrology, UFOs, ghosts, clairvoyance, faith healing, bleeding statues, telepathy, precognition, spoon bending, Big Foot, dowsing, Bible code, magnet therapy, Karma, reincarnation and Ouija boards – to name just a few. What should one believe about such phenomena? How is one to distinguish science from pseudoscience, sound reasoning from wishful thinking, truth from falsehood, good evidence from lies, fraud and fakery, and effective medical treatments from quackery? This course is about the answers to these questions. It is about critical thinking, logic, the evaluation of competing hypotheses, and the nature of scientific knowledge. It teaches the skills and knowledge one needs in order to be able to draw rational conclusions for oneself about what is real and what is not.

The course is organized into a ‘critical thinkers’ toolkit’. Each lecture presents one ‘tool’ from the toolkit, in the form of a principle, or heuristic, or maxim that serves as a powerful aid to good reasoning.

### ***Learning outcomes***

1. Familiarity with a set of twenty key principles for critical thinking.
2. The ability to apply these principles in everyday situations.
3. A basic understanding of essential elements of the scientific method.
4. An appreciation of how science differs from pseudoscience.
5. A familiarity with common sources of erroneous belief, including the placebo effect, the Barnum effect, selective reporting, the untrustworthiness of eyewitness testimony, and the limited reliability of the human faculties of perception, memory, and statistical intuition.
6. A basic appreciation for what logic is, and an ability to recognize common patterns of fallacious reasoning.
7. Enhanced ability to work effectively and professionally with others.
8. An ability to write a short essay that clearly articulates a thesis, and argues for it.

### *Schedule of topics*

	Week starts	First weekly lecture (Monday 12-1)	Second weekly lecture (Wednesday 9-10)
Week 1	18 Feb	Lecture #1. Beware sensory experience	Lecture #2. Beware the vagaries of memory
Week 2	25 Feb	Lecture #3. How to write a philosophy essay	Lecture #4. Be skeptical
Week 3	4 March	Lecture #5. Be skeptical / beware relativism	Lecture #6. Beware relativism
Week 4	13 March	Lecture #7. Beware Confirmation Bias	Lecture #8. Beware of mind viruses
Week 5	18 March	Lecture #9. Beware unfalsifiable hypotheses	Lecture #10. Use double-blind, randomized, placebo-controlled trials
Week 6	25 March	Lecture #11. Trust science almost always	Lecture #12. Beware eyewitness testimony
Week 7	1 April	Lecture #13. Beware naïve statistical intuitions.	Lecture #14. Beware contradiction (Essay 1 due at the end of this week.)
Three week break			
Week 8	29 April	Lecture #15. Use the SEARCH formula.	Lecture #16. Use the SEARCH formula (continued)
Week 9	6 May	Lecture #17. Beware patternicity	Lecture #18. Beware agenticity
Week 10	13 May	Lecture #19. Beware the Barnum effect	Lecture #20. Beware cold readers
Week 11	20 May	Lecture #21. Use logic	Lecture #22. Use logic (continued)
Week 12	27 May	Lecture #23. Beware fallacies	Lecture #24. Beware fallacies (continued) (Essay 2 due at the end of this week.)

#### **Lecturer**

Dr Doug Campbell (course coordinator)

- Office: Karl Popper 618
- Email: [douglas.campbell@canterbury.ac.nz](mailto:douglas.campbell@canterbury.ac.nz)
- Phone (03) 3642987 x6859
- Office hour: Friday 1pm.

#### **Tutors**

Syed Nizar

- Email: [nizar.alamnizar@pg.canterbury.ac.nz](mailto:nizar.alamnizar@pg.canterbury.ac.nz)

Zhao Fan

- Email: [zhao.fan@pg.canterbury.ac.nz](mailto:zhao.fan@pg.canterbury.ac.nz)

#### ***On-campus versus distance occurrences of the course***

There are two occurrences of this course – an *on-campus occurrence* and a *distance occurrence*. The distance occurrence is for STAR school students, and for “Arts At A Distance” students. Both versions of the course run at the same time and have the same assessment. The primary sources of course material for on-campus students are on-campus lectures and tutorials. The primary source of course material for distance students is the course website. However on-campus students will have full access to all the material made available to distance students on the course website, and, likewise, distance students will have full access to all lectures (which will be videoed, and made available online).

Regardless of which type of student you are, you should BOTH watch all the lectures (either by attending them in person, or by watching them online), AND do all the online tasks.

### ***Lecture and tutorial times***

For up-to-date information about lecture and tutorial times, see the university's MyTimetable site.

### ***Tutorials***

On-campus students will be automatically assigned to a tutorial stream. Tutorials begin in the second week.

Distance STAR students will receive 50 minutes of tutorial support per week from their school.

Arts At a Distance students will be tutored by the course's lecturer, Doug. All such students should make contact with Doug ([douglas.campbell@canterbury.ac.nz](mailto:douglas.campbell@canterbury.ac.nz)) to arrange their tutorials.

### ***Course Assessment***

30% Essay 1: **Due Friday 5 April** at midnight. Target length: 1200 words.

30% Essay 2: **Due Friday 31 May** at midnight. Target length: 1000 words.

40% The best 10 from 12 weekly online mini-assessment tasks (4% each).

### ***Weekly mini-assessments***

There will be a mini-assessment task every week. It will be due **at midnight on the Sunday of that week**. Each mini-assessment is worth 4% of the course. Only the best ten of the twelve weekly mini-assessments will count. (I.e., your worst two mini-assessment results will be ignored. This means that you can potentially skip two mini-assessments without penalty, or improve on a low mark.)

The mini-assessment tasks will typically take the form of a *forum contribution*, or a *quiz*, or the production of either a *poster* or a *short (3 slide max) power-point presentation*.

The mini-assessment tasks are to be submitted online, on the course's Learn site. Each week's mini-assessment task will be found in the Learn-page for *the second* (rather than the first) of that week's two lectures. (So, for instance, the mini-assessment task for week 3 will be found in the Learn page for Lecture #6, and the mini-assessment task for week 8 will be found in the Learn page for Lecture #16.)

### ***Essay Submission***

Essays are to be submitted electronically via PHIL110 learn site. (The electronic essay drop-box will be located on the Essay Information and Submission page, which you be able to find very easily on the Phil 110 website.) Essays should preferably be submitted at a word document (in either a **.docx** or **.doc** format). Alternative, you may submit your essay in a **.rtf** format.

Note: "By taking this course students agree that their work may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com site."

### ***Essay Writing Advice***

Information on how to write a philosophy will be provided in Lecture #3. For extensive online information about writing philosophy essays, see the online material for Lecture #3.

### ***Essay Due-Date Extensions***

Extension must be sought before the due date (the earlier, the better).

### ***Penalties for late work (for which no extension has been granted)***

2% per weekday. Late essays will not be accepted after essays have been graded and returned.

### ***Plagiarism and Dishonest Practice***

Plagiarism occurs when passages of text are copied into an essay without being included in quotation marks and without sufficient acknowledgement of the source for the quotation. Minor variations to the

wording of the original are not sufficient to avoid the charge of plagiarism. Plagiarism is regarded very seriously in the university, and may result in disciplinary action. Any essay in which significant plagiarism occurs will not be given a passing grade. If a substantial proportion of the essay is plagiarized, it will receive a zero grade. The department's policy is as follows:

Under no circumstances may you copy the words of an article or book without acknowledging it as a quotation. Nor may you copy or borrow extensively from the essays of other students, or have any other person write an essay for you. Be aware that we view these forms of cheating very seriously, and that we regularly take steps to detect plagiarism in work submitted by students. If we find that that you have engaged in dishonest practice, you may be subject to disciplinary action. Penalties range from a failing grade on the specific item of assessment or the course as a whole to expulsion from the university.

### ***Aegrotats***

Provisions for special consideration are in the Aegrotat Regulations in the Calendar. If you are unable to complete the assessment for the course, for medical or other reasons, then you should apply for an Aegrotat. The procedures are explained here, under "Aegrotat Consideration: Procedures":

<http://www.canterbury.ac.nz/ucpolicy/index.aspx>

### ***Required Text***

- Schick and Vaughn (2001), *How to Think About Weird Things*, 6<sup>th</sup> edition. McGraw Hill. (Earlier and later editions are just as good.)

### ***Additional Course Material***

- A great deal of essential additional course material is available on the course's Learn page (which can be accessed from the University of Canterbury's website – click "Current Students", then "Learn (Moodle)", then type your username and password, and then click on "Phil 110").

### ***Want to major in philosophy?***

BA or BSc students who major in philosophy must normally take:

1. at least **two** 100-level PHIL courses
2. at least **three** 200-level PHIL courses, one of which must be *PHIL233 Epistemology and Metaphysics*.
3. at least **two** 30-point 300-level courses, one of which must be either *Phil305 Philosophical Logic*, or *Phil310 Early Modern Philosophy*, or *Phil311 Recent and Contemporary Philosophy*, or *Phil317 Contemporary Political Philosophy*.

For more information see the BA regulations and/or the BSc regulations. Note that you can combine a major in philosophy with a major in another subject.

### ***Additional information about Phil 110***

- For the Assessed Work in Maori Policy see: <http://www.canterbury.ac.nz/ucpolicy/index.aspx>
- Points: 15 points
- EFTS: 0.1250 EFTS
- Course Dates: 24 Feb 2014 - 29 Jun 2014
- Restrictions: HAPS 110
- Domestic Fee: \$761.00
- International Fee: \$3,188.00
- Last day to withdraw from a course with a refund: 2 March
- Last day to withdraw from a course without a refund: 18 May (Applications to withdraw after this date must be made on a "Backdated Discontinuation" form available from Student Services Centre.