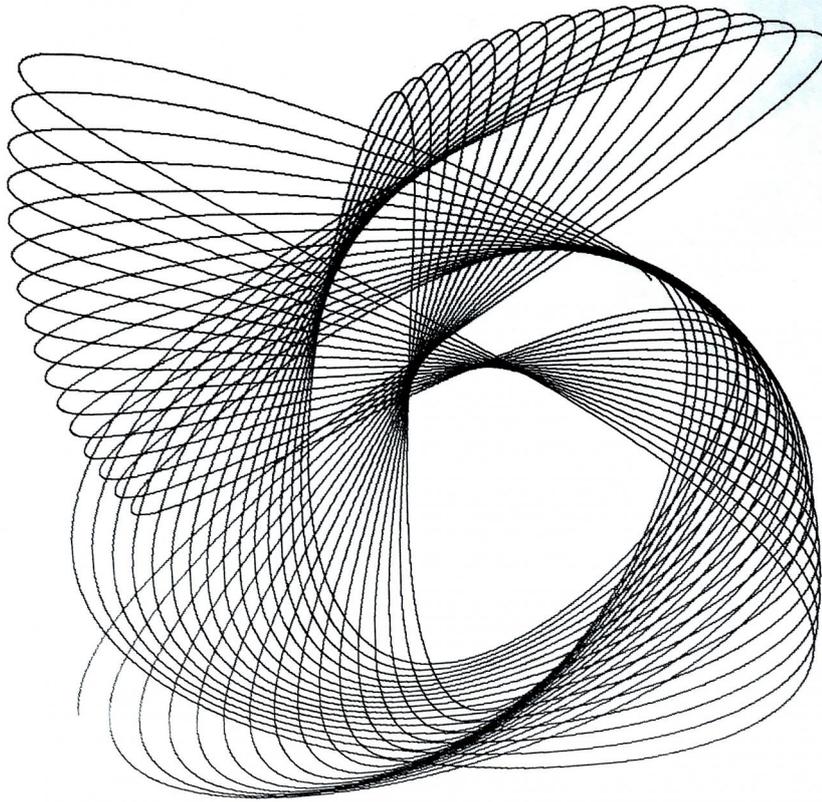




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ARTS2388

Philosophy of Science

Semester Two // 2018

Course Overview

Staff Contact Details

Convenors

Name	Email	Availability	Location	Phone
Peter Slezak	p.slezak@unsw.edu.au	By appointment	Room 315, Morven Brown Bldg.	(02)9385-24 22

School Contact Information

School of Humanities and Languages

Location: School Office, Morven Brown Building, Level 2, 258

Opening Hours: Monday - Friday, 9am - 5pm

Phone: +61 2 9385 1681

Fax: +61 2 9385 8705

Email: hal@unsw.edu.au

Attendance Requirements

A student is expected to attend all class contact hours for a face-to-face (F2F) or blended course and complete all activities for a blended or fully online course.

A student who arrives more than 15 minutes late may be penalised for non-attendance. If such a penalty is imposed, the student must be informed verbally at the end of class and advised in writing within 24 hours.

If a student experiences illness, misadventure or other occurrence that makes absence from a class/activity unavoidable, or expects to be absent from a forthcoming class/activity, they should seek permission from the Course Authority, and where applicable, their request should be accompanied by an original or certified copy of a medical certificate or other form of appropriate evidence.

A Course Authority may excuse a student from classes or activities for up to one month. However, they may assign additional and/or alternative tasks to ensure compliance. A Course Authority considering the granting of absence must be satisfied a student will still be able to meet the course's learning outcomes and/or volume of learning. A student seeking approval to be absent for more than one month must apply in writing to the Dean and provide all original or certified supporting documentation.

For more information about the attendance protocols in the Faculty of Arts and Social Sciences: <https://www.arts.unsw.edu.au/current-students/academic-information/protocols-guidelines/>

Academic Information

For essential student information relating to: requests for extension; review of marks; occupational health and safety; examination procedures; special consideration in the event of illness or misadventure; student equity and disability; and other essential academic information, see <https://www.arts.unsw.edu.au/current-students/academic-information/protocols-guidelines/>

Course Details

Credit Points 6

Summary of the Course

Subject Area: *Philosophy*

Are electrons or other subatomic particles real? Does science lead to reliable knowledge? Is science objective? Is there such a thing as scientific method? Is Darwinian evolution "just a theory"? Is Creation Science a science or religion? What about astronomy and astrology? In addressing these sorts of questions we cannot just do more science, we have to reflect on the nature of science. We need to do philosophy of science. This course introduces you to philosophy of science which may involve inquiry into the nature and development of concepts, laws and theories, and also into the character of explanation and prediction in the natural and social sciences. The course will examine some philosophical problems concerning scientific method and scientific knowledge. Different teachers will focus on different sciences such as mathematics, physics, ecology and biology and the social sciences.

At the conclusion of this course the student will be able to

1. Identify and critically assess arguments concerning the understanding of science
2. Explain key conceptual tools for analysing arguments
3. Articulate key positions and doctrines in the philosophy of science
4. Engage in independent research by producing a written essay

Teaching Strategies

Lectures in philosophy using debate and dialogue are the most effective way to engage students and to provide insightful, stimulating guidance to the key ideas of the subject. The lectures provide central, controversial ideas and theories as well as helping students to understand difficult concepts encountered in their reading.

Tutorials provide an opportunity for students to explore and debate the topics raised in lectures and reading materials.

Tutorials provide an opportunity for students to express their views and their confusions and to develop their thoughts through critical argument with other students and the teacher.

The essay assignment is an important vehicle for developing the skill of critical analysis and scholarly writing and learning the techniques of academic writing.

Assessment

For the Essay, a list of suggested topics will be provided on Moodle.

Any conventional academic referencing system is acceptable.

Assessment Tasks

Assessment task	Weight	Due Date	Student Learning Outcomes Assessed
Moodle Quiz	25%	03/09/2018 11:00 PM	1
Textual Analysis	25%	02/10/2018 11:00 PM	1,2,3
Essay	50%	19/10/2018 11:00 PM	1,2,3,4

Assessment Details

Assessment 1: Moodle Quiz

Start date: 19/07/2018 09:00 AM

Details: An online quiz (ca. 30 minutes) of multiple choice questions to test comprehension of key texts.

Turnitin setting: This is not a Turnitin assignment

Assessment 2: Textual Analysis

Start date: 24/09/2018 11:00 PM

Length: 700 - 1,000 words

Details: Short analysis of a passage in a key text, about 700 words. Feedback by mark and comments.

Turnitin setting: This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Assessment 3: Essay

Start date: Not Applicable

Length: 3,000 words

Details: About 3,000 word length. Feedback through mark and comments. This is the final assessment for attendance purposes.

Turnitin setting: This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Submission of Assessment Tasks

Students are expected to put their names and student numbers on every page of their assignments.

Turnitin Submission

If you encounter a problem when attempting to submit your assignment through Turnitin, please telephone External Support on 9385 3331 or email them on externalteltsupport@unsw.edu.au. Support hours are 8:00am – 10:00pm on weekdays and 9:00am – 5:00pm on weekends (365 days a year). If you are unable to submit your assignment due to a fault with Turnitin you may apply for an extension, but you must retain your ticket number from External Support (along with any other relevant documents) to include as evidence to support your extension application. If you email External Support you will automatically receive a ticket number, but if you telephone you will need to specifically ask for one. Turnitin also provides updates on their system status on Twitter.

Generally, assessment tasks must be submitted electronically via either Turnitin or a Moodle assignment. In instances where this is not possible, it will be stated on your course's Moodle site with alternative submission details.

Late Assessment Penalties

Students are responsible for the submission of assessment tasks by the required dates and times. Depending of the extent of delay in the submission of an assessment task past the due date and time, one of the following late penalties will apply unless special consideration or a blanket extension due to a technical outage is granted. For the purpose of late penalty calculation, a 'day' is deemed to be each 24-hour period (or part thereof) past the stipulated deadline for submission.

- **Work submitted less than 10 days after the stipulated deadline** is subject to a deduction of 5% of the total awardable mark from the mark that would have been achieved if not for the penalty for every day past the stipulated deadline for submission. That is, a student who submits an assignment with a stipulated deadline of 4:00pm on 13 May 2016 at 4:10pm on 14 May 2016 will incur a deduction of 10%.

Task with a non-integer percentage mark

If the task is marked out of 25, then late submission will attract a penalty of a deduction of 1.25 from the mark awarded to the student for every 24-hour period (or part thereof) past the stipulated deadline.

Example: A student submits an essay 48 hours and 10 minutes after the stipulated deadline. The total possible mark for the essay is 25. The essay receives a mark of 17. The student's mark is therefore $17 - [25 (0.05 \times 3)] = 13.25$

Task with a percentage mark

If the task is marked out of 100%, then late submission will attract a penalty of a deduction of 5% from the mark awarded to the student for every 24-hour period (or part thereof) past the stipulated deadline.

Example: A student submits an essay 48 hours and 10 minutes after the stipulated deadline. The essay is marked out of 100%. The essay receives a mark of 68. The student's mark is therefore $68 - 15 = 53$

- **Work submitted 10 to 19 days after the stipulated deadline** will be assessed and feedback provided but a mark of zero will be recorded. If the work would have received a pass mark but for the lateness and the work is a compulsory course component (hurdle requirement), a student will be deemed to have met that requirement;
- **Work submitted 20 or more days after the stipulated deadline** will not be accepted for assessment and will receive no feedback, mark or grade. If the assessment task is a compulsory component of the course a student will receive an Unsatisfactory Fail (UF) grade as a result of unsatisfactory performance in an essential component of the course.

This information is also available at:

<https://www.arts.unsw.edu.au/current-students/academic-information/protocols-guidelines/>

Special Consideration Applications

You can apply for special consideration when illness or other circumstances interfere with your assessment performance.

Sickness, misadventure or other circumstances beyond your control may:

- * Prevent you from completing a course requirement,
- * Keep you from attending an assessable activity,
- * Stop you submitting assessable work for a course,
- * Significantly affect your performance in assessable work, be it a formal end-of-semester examination, a class test, a laboratory test, a seminar presentation or any other form of assessment.

For further details in relation to Special Consideration including "When to Apply", "How to Apply" and "Supporting Documentation" please refer to the Special Consideration webstie:

<https://student.unsw.edu.au/special-consideration>

Academic Honesty and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement.

UNSW groups plagiarism into the following categories:

Copying: using the same or very similar words to the original text or idea without acknowledging the source or using quotation marks. This also applies to images, art and design projects, as well as presentations where someone presents another's ideas or words without credit.

Inappropriate paraphrasing: Changing a few words and phrases while mostly retaining the original structure and/or progression of ideas of the original, and information without acknowledgement. This also applies in presentations where someone paraphrases another's ideas or words without credit and to piecing together quotes and paraphrases into a new whole, without appropriate referencing.

Collusion: working with others but passing off the work as a person's individual work. Collusion also includes providing your work to another student before the due date, or for the purpose of them plagiarising at any time, paying another person to perform an academic task, stealing or acquiring another person's academic work and copying it, offering to complete another person's work or seeking payment for completing academic work.

Inappropriate citation: Citing sources which have not been read, without acknowledging the "secondary" source from which knowledge of them has been obtained.

Duplication ("self-plagiarism"): submitting your own work, in whole or in part, where it has previously been prepared or submitted for another assessment or course at UNSW or another university.

Correct referencing practices:

- Paraphrasing, summarising, essay writing and time management
- Appropriate use of and attribution for a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre (<http://www.lc.unsw.edu.au/>). Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and proper referencing of sources in preparing all assessment items.

UNSW Library also has the ELISE tool available to assist you with your study at UNSW. ELISE is designed to introduce new students to studying at UNSW but it can also be a great refresher during your study.

Completing the ELISE tutorial and quiz will enable you to:

- analyse topics, plan responses and organise research for academic writing and other assessment tasks
- effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- use and manage information effectively to accomplish a specific purpose
- better manage your time

- understand your rights and responsibilities as a student at UNSW
- be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- be aware of the standards of behaviour expected of everyone in the UNSW community
- locate services and information about UNSW and UNSW Library

Some of these areas will be familiar to you, others will be new. Gaining a solid understanding of all the related aspects of ELISE will help you make the most of your studies at UNSW.

(<http://subjectguides.library.unsw.edu.au/elise/aboutelise>)

Course Schedule

[View class timetable](#)

Timetable

Date	Type	Content
Week 1: 23 July - 29 July	Tutorial	Origins of Western Science & Philosophy K.R. Popper: Back to the Presocratics
Week 2: 30 July - 5 August	Tutorial	Galileo & 17th Century Scientific Revolution: Science & Religion Galileo: Letter to Duchess Christina M.A. Finocchiaro: The Galileo Affair P. Slezak: Review of Finocchiaro
Week 3: 6 August - 12 August	Tutorial	Miracles and the Laws of Nature David Hume: Of Miracles J. Earman: Hume's Abject Failure A. Plantinga: Does Science Contradict Religion?
Week 4: 13 August - 19 August	Tutorial	Logical Positivism: the Demarcation Problem Moritz Schlick: The Turning Point in Philosophy A.J. Ayer: The Elimination of Metaphysics L. Laudan: The Demise of the Demarcation Problem
Week 5: 20 August - 26 August	Tutorial	Post-Positivism: Scientific Revolutions T.S. Kuhn: The Structure of Scientific Revolutions K.R. Popper: Conjectures and Refutations T.S. Kuhn: Logic of Discovery or Psychology of Research
Week 6: 27 August - 2 September	Tutorial	Scientific Explanation: Covering Laws C. Hempel: Two Models of Scientific Explanation W. Salmon: Four Decades of Scientific Explanation P. Kitcher: Explanatory Unification
Week 7: 3 September - 9 September	Tutorial	Scientific Realism

		Stathis Psillos: Scientific Realism & the Pessimistic Induction L. Laudan: A Confutation of Convergent Realism
Week 8: 10 September - 16 September	Tutorial	Religion and Science: Naturalism R.T. Pennock: Can't philosophers tell the difference between science & religion? P. Slezak: Review of Michael Ruse 'Science & Spirituality'
Week 9: 17 September - 23 September	Tutorial	Pseudo Science: Psychoanalysis, Astrology, Parapsychology A. Grünbaum: Foundations of Psychoanalysis P. Thagard: Why Astrology is a pseudoscience P. Churchland: How parapsychology could become a science.
Break: 24 September - 30 September		
Week 10: 1 October - 7 October	Tutorial	Creationism, Intelligent Design W. Paley: Natural Theology David Hume: Dialogues Concerning Natural Religion
Week 11: 8 October - 14 October	Tutorial	Special Sciences P. Kitcher: 1953 And All That. J. Fodor: Special Sciences A. Rosenberg: Why a Philosophy of Social Science?
Week 12: 15 October - 21 October	Tutorial	Post Modernism, Social Constructivism & the Science Wars D. Bloor: Knowledge & Social Imagery P. Slezak: Sociology of Scientific Knowledge B. Latour & S. Woolgar: Laboratory Life P. Slezak: Laboratory Life Under the Microscope
Week 13: 22 October - 28 October		

Resources

Prescribed Resources

There is no textbook as such. Course readings are made available on Moodle.

Recommended Resources

Not available

Course Evaluation and Development

Student feedback will be gathered informally through the semester and by anonymous online myExperience feedback at the end of the course.

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