

# History and Philosophy of Science

<b>Year and Campus:</b>	2016
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<b>Contact:</b>	<p>Currently enrolled students:</p> <p># <b>Contact Stop 1</b> (<a href="http://students.unimelb.edu.au/stop1">http://students.unimelb.edu.au/stop1</a>)</p> <p>Future students:</p> <p># <a href="https://futurestudents.unimelb.edu.au">https://futurestudents.unimelb.edu.au</a> (<a href="https://futurestudents.unimelb.edu.au/">https://futurestudents.unimelb.edu.au/</a>)</p>
<b>Overview:</b>	The aim of History and Philosophy of Science is to understand science: how it works, its historical development and its function in modern society. History and Philosophy of Science integrates philosophical, historical and sociological approaches to the study of science. It thus provides students with an insight into scientific methods and objectives without actually having to do science. Students will gain analytical skills in evaluating scientific (and non-scientific) knowledge as well as a broad understanding of the historical development of science in its interactions with philosophy, religion and society.
<b>Learning Outcomes:</b>	<p>On successful completion of this major, students will be able to:</p> <ul style="list-style-type: none"> <li># possess a broad knowledge and understanding of the discipline and will be able to identify, understand and synthesise the major theoretical, philosophical, sociological and historiographical themes in HPS; and</li> <li># possess a deep knowledge of one of the following areas: history of science; philosophy of science; sociology of science or technology; and</li> <li># create sustained and critical arguments using appropriate knowledge and methods, culminating in independent and self-directed research; and</li> <li># develop an awareness of the relationship between HPS and other disciplines, especially the sciences; and</li> <li># demonstrate integrity and ethical awareness in all aspects of the programme's learning activities; and</li> <li># apply HPS knowledge to real-world practice, including the development of policy and the provision of informed comment about science, society and technology; and</li> <li># develop a wide range of life skills including: life-long learning; excellent communication; effective collaboration in small and large groups; and a high-level of organization; and</li> <li># reflect upon their own (individual) relationship with science and society.</li> </ul>
<b>Structure &amp; Available Subjects:</b>	<p>History and Philosophy of Science is available as a 100 point major and a 75 point minor in the BA, comprising two level one subjects, one sequence of level 2 and 3 subjects and one or two subjects from the list of elective subjects.</p> <p>Major</p> <p><b>Level 1</b> 25 points comprising of the following:</p> <ul style="list-style-type: none"> <li># One <b>Arts Foundation Subject</b> (<a href="http://handbook.unimelb.edu.au/view/current/%21B-ARTS-SPC%2B1001">../view/current/%21B-ARTS-SPC%2B1001</a>) : MULT10016 Reason is recommended but not required, and HPSC10001 From Plato to Einstein, HPSC10002 Science and Pseudoscience, or HPSC10003 Debating Science in Society</li> </ul> <p><b>Level 2</b></p> <ul style="list-style-type: none"> <li># 37.5 points of level two HPS subjects</li> </ul> <p><b>Level 3</b></p> <ul style="list-style-type: none"> <li># 37.5 points of level three HPS subjects including the capstone subject: HPSC30035 Knowledge in the Making</li> </ul> <p>Total 100 points</p> <p>Minor</p> <p>Level 1</p>

25 points comprising of the following:

- # One **Arts Foundation Subject** ([././view/current/%21B-ARTS-SPC%2B1001](#)) :  
 MULT10016 Reason is recommended but not required, and HPSC10001 From Plato to Einstein, HPSC10002 Science and Pseudoscience, or HPSC10003 Debating Science in Society

**Level 2**

- # 25 points of level two HPS subjects

**Level 3**

- # 25 points of level three HPS subjects

Total 75 points

**Students are recommended to take one of the following subject sequences within their major or minor:**

# **Methodological Approaches to History and Philosophy of Science**

- PHIL20001 Science Reason and Reality (level 2)
- HPSC30023 Science and Society (Level 3)
- HPSC30034 Magic, Reason, New Worlds, 1450-1750 (Level 3)
- HPSC30035 Knowledge in the Making (Level 3)

# **History of Science**

- HPSC20015 Astronomy in World History (Level 2)
- HPSC20001 Darwinism: history of a very big idea (Level 2)
- HPSC20022 Electricity: An Experimental History (Level 2)

# **Science, Technology and Society**

- HPSC10003 Debating Science in Society (Level 1)
- HPSC20009 Technology and Contemporary Life (Level 2)
- HPSC30023 Science and Society (Level 3)

# **Life Sciences**

- HPSC20002 A History of Nature (Level 2)
- HPSC20001 Darwinism: History of a very big idea (Level 2)

# **Minds, Belief and History**

- HPSC20015 Astronomy in World History (Level 2)
- HPSC20020 God and the Natural Sciences (Level 2)
- HPSC30019 Minds and Madness (Level 3)
- HPSC30036 Forensic Science & the Law: a case study (Level 3)
- HPSC30034 Magic, Reason, New Worlds, 1450- 1750 (Level 3)

# **Philosophy of Science**

- PHIL20001 Science, Reason and Reality (Level 2)
- HPSC20020 God and the Natural Sciences (Level 2)
- HPSC30035 Knowledge in the Making (Level 3)

In addition to a sequence students completing a major must also complete two electives and students completing a minor one elective from the list below.

**Subject Options:**

**Level 1 Subjects**

Subject	Study Period Commencement:	Credit Points:
HPSC10002 Science and Pseudoscience	Semester 1	12.50
HPSC10001 From Plato to Einstein	Semester 2	12.50
HPSC10003 Debating Science in Society	Semester 2	12.5

**Level 2 Subjects**

See recommended sequences above.

Subject	Study Period Commencement:	Credit Points:
HPSC20002 A History of Nature	January	12.50
HPSC20009 Technology & Contemporary Life	January	12.50

HPSC20015 Astronomy in World History	February	12.50
HPSC20020 God and the Natural Sciences	Semester 1	12.50
PHIL20001 Science, Reason and Reality	Semester 1	12.50
HPSC20001 Darwinism: history of a very big idea	Semester 2	12.50
HPSC20022 Electricity: An Experimental History	Semester 2	12.5

### Level 3 Subjects

See recommended sequences above.

Subject	Study Period Commencement:	Credit Points:
HPSC30023 Science and Society	Semester 1	12.50
HPSC30034 Magic, Reason, New Worlds, 1450-1750	Semester 1	12.50
HPSC30036 Forensic Science & the Law: A Case Study	July	12.50
HPSC30019 Minds and Madness	Semester 2	12.50

### Level 3 Capstone Subject

The capstone subject is compulsory for students completing a major, and is not available to students completing a minor.

Subject	Study Period Commencement:	Credit Points:
HPSC30035 Knowledge in the Making	Semester 2	12.50

### Level 2 Elective Subjects

Students completing a major are required to complete two electives at either level two or level three. Students completing a minor must complete one elective, at either level two or level three.

Subject	Study Period Commencement:	Credit Points:
HPSC20002 A History of Nature	January	12.50
HPSC20009 Technology & Contemporary Life	January	12.50
HPSC20015 Astronomy in World History	February	12.50
HPSC20020 God and the Natural Sciences	Semester 1	12.50
PHIL20001 Science, Reason and Reality	Semester 1	12.50
PHIL20033 The Philosophy of Mind	Semester 1	12.50
HPSC20001 Darwinism: history of a very big idea	Semester 2	12.50
HPSC20022 Electricity: An Experimental History	Semester 2	12.5
PHIL20030 Meaning, Possibility and Paradox	Semester 2	12.50
PHIL20018 Matters of Life and Death	Not offered 2016	12.5

### Level 3 Elective Subjects

Students completing a major are required to complete two electives at either level two or level three. Students completing a minor must complete one elective, at either level two or level three.

	<b>Subject</b>	<b>Study Period Commencement:</b>	<b>Credit Points:</b>
	ANCW30004 Beyond Babylon	Semester 1	12.5
	HPSC30023 Science and Society	Semester 1	12.50
	HPSC30034 Magic, Reason, New Worlds, 1450-1750	Semester 1	12.50
	PHIL30016 Knowledge and Reality	Semester 1	12.5
	HPSC30036 Forensic Science & the Law: A Case Study	July	12.50
	HPSC30019 Minds and Madness	Semester 2	12.50
	PHIL30043 The Power and Limits of Logic	Semester 2	12.5
<b>Links to further information:</b>	<a href="http://shaps.unimelb.edu.au/history-philosophy-science">http://shaps.unimelb.edu.au/history-philosophy-science</a>		
<b>Related Course(s):</b>	Bachelor of Arts		