History and philosophy of science

History and Philosophy of Science (HPS) provides science and other students with an understanding of the philosophical, social and historical dimensions of science. Put simply History and Philosophy of Science completes the picture. It encompasses five main areas; history of science, philosophy of science, sociology of science, history of medicine and environmental history.

History and Philosophy of Science asks questions such as:

- In what ways are scientific understandings, and the way we view and interact with the non-human world around us, culturally determined?
- How do cyborgs, virtual reality, and cyberspace re-make human identity?
- How has the definition of insanity been altered by the rise of science and the decline of magical beliefs?
- How do the new genetic technologies define what it means to be human?
- If science tells the truth, why do scientists sometimes say one thing (for example, dinosaurs were cold-blooded) and then later say the opposite (dinosaurs were warm-blooded)?
- What determines which diseases are given priority in medical research?
- Can science usefully work with Aboriginal beliefs about nature to better conserve the environment?
- Is it really true that people in medieval Europe believed the earth was flat?
- When science and religion disagree, which should we believe?
- How has science influenced our attitude towards women, religious or racial minorities?
- Are science students well trained to think for themselves or are they just trained to apply the current popular scientific theories?
- How much influence in society should scientists have?

Suggested subjects

Students should consult the full list of history and philosophy of science subjects and their detailed descriptions (see page 1).

Not all history and philosophy of science subjects receive science credit. The history and philosophy of science subjects listed below do qualify for science credit towards the Bachelor of Science. Where a student elects to complete a history and philosophy of science subject that does not appear in this list, science credit will be not be awarded towards the Bachelor of Science degree.

Note:

- Students enrolled in a combined Bachelor of Science course are not entitled to count non-science points towards the Bachelor of Science component.
- History and philosophy of science subjects cannot count toward the science component of the Bachelor of Arts/Bachelor of Science combined course or the science requirement of the Bachelor of Arts and Sciences course.

Science students are able to major in history and philosophy of science, but they must also have qualified for a second science major, as detailed in *Planning a science major (p.11)*.

100-level subjects

All 100-level subjects are available to science students without prerequisites.

200-level subjects

Students are generally required to have completed at least 75 points at the 100-level before enrolling in 200-level subjects. Completion of 100-level HPS is not required.

300-level subjects

Students are required to have completed at least 25 points (two subjects) of 200-level HPS subjects before enrolling in 300-level HPS subjects.

It is recommended that students wishing to study HPS as a science major complete 37.5 points (three subjects) of 200-level HPS subjects.

Bachelor of Science (Degree with Honours)

For information about the faculty and departmental entry requirements for honours, please refer to *Bachelor of Science (Degree with Honours) and Bachelor of Information Systems (Degree with Honours) (p.1)*. These requirements should be considered when planning your course.

Further information

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Fax:+61 3 8344 7959
Web: http://www.hps.unimelb.edu.au

HPS subjects available for science credit

Careful attention should be paid to the level and number of science credit points that will be awarded for the completion of these subjects.

Note: History and philosophy of science subjects count toward the Bachelor of Arts component of either the Bachelor of Arts/Bachelor of Science combined course or the Bachelor of Arts and Sciences course. Refer to the arts section of this Handbook for points details.

100-level subjects

136-103 The Good Life and Science
See full subject details on page 2.

136-105 Science, Philosophy and History
See full subject details on page 2.

136-111 From Plato to Einstein
See full subject details on page 2.

136-175 The Ecological History of Humankind
See full subject details on page 2.

200-level subjects

136-029 Darwinism
See full subject details on page 3.

136-033 Science, Reason and Reality
See full subject details on page 3.

136-035 A History of Nature
See full subject details on page 3.

136-037 Biotechnology in Modern Society
See full subject details on page 3.

136-205 Cybersociety
See full subject details on page 4.

136-208 History and Philosophy of Mathematics
See full subject details on page 4.

136-211 Asian Civilisations and Science
See full subject details on page 5.

136-213 Environmental History of Australia
See full subject details on page 5.

136-260 God and the Natural Sciences
See full subject details on page 5.

136-288 History of Astronomy
See full subject details on page 5.

300-level subjects

136-305 Cybersociety (Science 3)
See full subject details on page 6.

136-308 History and Philosophy of Maths (Sci.3)
See full subject details on page 6.

136-311 Asian Civilisations & Science (Science3)
See full subject details on page 6.

136-313 Environmental History of Australia (Sc3)
See full subject details on page 6.

136-329 Darwinism (Science 3)
See full subject details on page 7.

136-333 Science, Reason and Reality (Science 3)
See full subject details on page 7.

136-335 A History of Nature (Science 3)
See full subject details on page 7.

136-337 Biotechnology in Modern Society (Sci.3)
See full subject details on page 8.

136-360 God and the Natural Sciences (Science 3)
See full subject details on page 8.

136-388 History of Astronomy (Science 3)
See full subject details on page 8.