# HPSC20001 Darwinism

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| **Credit Points:** | 12.50 |
| **Level:** | 2 (Undergraduate) |
| **Commencement Date & Location:** | 2011, Parkville<br>This subject commences in the following study period/s:<br>Semester 1 - Taught on campus.<br>Standard |
| **Time Commitment:** | Contact Hours: 3 (1x2 hour lecture and 1x 1 hour tutorial per week)<br>Total Time Commitment: An average of 8.5 hours each week |
| **Prerequisites:** | None. |
| **Corequisites:** | None. |
| **Recommended Background Knowledge:** | Knowledge gained in at least 75 points of first year study. |
| **Non Allowed Subjects:** | Students who have completed 'Darwinism under the codes 136-029, 136-329 or 672-315 are not permitted to enrol in this subject. Students who have completed 'Darwinism' under the code HPSC30004 are not permitted to enrol in this subject. |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. |
| **Subject Overview:** | This subject will provide students with an exciting and stimulating introduction to the origins and implications of Charles Darwin's revolutionary theory of evolution by means of natural selection. We begin by exploring the pre-Darwinian cosmos, a place where an omnipotent God designed and ordained the natural world, and where nature was viewed through the lens of the Bible. But during the eighteenth and early nineteenth centuries this view was challenged by scientists and philosophers. We explore the impact of these ideas, particularly: the new geology that challenged the Biblical stories of Creation and the Great |

Flood. The observations of plants and animals that began to suggest common descent. The evolutionary theories that preceded Darwin's own and the fraught socio-economic context that arguably helped inspire Darwin's vision of a natural world steeped in struggle. Particular emphasis is placed upon Darwin's life, and the influence of society and culture upon his world-view. Here we explore the voyage of the Beagle as a watershed in Darwin's life and thinking. For five years he crisscrossed the oceans and circumnavigated the world, collecting specimens and observing nature. His experiences upon the voyage led him to question contemporary approaches to the origins of species, and to develop his own theory of evolution. But for many years he not make his views public, only admitting them to a close circle of friends, until a letter from Alfred Wallace prompted him hurriedly to publish Origin of Species in 1859. Why did Darwin delay? We discuss this issue in detail. The appearance of Origin caused a sensation, and we explore the impact of his work and the vigorous debates that surrounded it as a case study in the creation of scientific legitimacy and authority. We then chart how his theory was challenged and refined by generations of biologists, particularly Mendelian genetics. But equally important to the course is the application of evolutionary theory to the huge questions of religion, politics, warfare, colonialism, economics, as well as race, class and gender, from the late nineteenth until our own day. Explorations of Social Darwinism and Eugenics are fundamental aspects of this course, as is the issue of Darwinism's difficult relationship with god. We conclude with a discussion of Darwin's legacy both in terms of the relationship between science and religion, and the emergence of evolutionary approaches to understanding the human mind and behaviour.

**Objectives:**

Upon successful completion of this subject, students are expected to possess:

- an effective grasp of the history and historiography (i.e. how historians have written about over time) of Darwin and evolutionary theory.
- a sound critical ability, enabling the effective analysis and synthesis of the historiography.
- the ability to express a clear and sophisticated opinion about Darwin and Darwinism both to experts and to interested outsiders. and,
- the ability to undertake independent research and reading within the field, including the use of library resources (e.g. finding a book in the open stacks, or using Supersearch), and other online resources.

**Assessment:**

Tutorial assignment of 1500 words 35% (due mid-semester) and a 2500-word essay 65% (due at the end of semester). This subject has a minimum hurdle requirement of 75% tutorial attendance. Regular participation in

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| | tutorials is required. Assessment submitted late without an approved extension will be penalised at 10% per day. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject. |
| **Prescribed Texts:** | • Janet Browne, Darwin's Origin of Species: A Biography (New York: Grove Press, 2008) |

# PHIL20001 Science, Reason and Reality

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| **Credit Points:** | 12.50 |
| **Level:** | 2 (Undergraduate) |
| **Commencement Date & Location:** | 2011, Parkville<br>This subject commences in the following study period/s:<br>Semester 1 - Taught on campus.<br>Standard |
| **Time Commitment:** | Contact Hours: 3 (2x 1 hour lectures each week and 1x 1 hour tutorial in weeks 2-12) Total Time Commitment: An average of 8.5 hours each week. |
| **Prerequisites:** | None. |
| **Corequisites:** | None. |
| **Recommended Background Knowledge:** | Student enrolling in this subject must have completed 75 points at first year level. |
| **Non Allowed Subjects:** | Students who have completed 'Science, Reason and Reality' with the codes 136-033, 136333 672-316 or PHIL30004 are not permitted to enrol in this subject |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. |

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| **Subject Overview:** | This subject addresses some of the central issues in the philosophy of science. It will raise questions such as: What is the difference between science and non-science? Is there a universal scientific method? Or do the methods employed by scientists vary historically? Is scientific theory change a rational process? Is science objective? Do scientific theories inform us of the truth about the world? Students who take this class will have knowledge of the major themes of recent and contemporary philosophical thinking about science. They will also have experience of the methods of critical analysis and argument employed in the philosophy of science and a background on which to base further study in the area. |
| **Objectives:** | Students who successfully complete this subject will:<br>• have knowledge of the major ideas and theories of recent and contemporary philosophy of science.<br>• have background in the philosophy of science on which to base further research and study in the area.<br>• have experience with methods of critical analysis and argument employed in the philosophy of science, leading to improved general reasoning and analytical skills. |
| **Assessment:** | Written work totalling 4000 words comprising a 1500-word essay 30% (due mid-semester) and a 2500-word essay 70% (due at the end of semester). This subject has a minimum hurdle requirement of 75% tutorial attendance. Regular participation in tutorials is required. Assessment submitted late without an approved extension will be penalised at 10% per day. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject. |
| **Prescribed Texts:** | • What is This Thing Called Science? (A Chalmers)<br>• Philosophy of Science: The Central Issues (M Curd & J A Cover)<br>• Representing and Intervening (I Hacking) |

# HPSC20002 A History of Nature

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| **Credit Points:** | 12.50 |
| **Level:** | 2 (Undergraduate) |
| **Commencement Date & Location:** | 2011, Parkville<br>This subject commences in the following study period/s:<br>January - Taught on campus. |

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| | non standard - intensive |
| **Time Commitment:** | Contact Hours: 3 (1 x 2 hour lecture each day and 1 x 1 hour tutorial each day over the two week teaching period 31st January to 11th February 2011.)<br>Total Time Commitment: in addition to the contact time an average of 8.5 hours a week should be spent during the assessment period |
| **Prerequisites:** | None. |
| **Corequisites:** | None. |
| **Recommended Background Knowledge:** | Knowledge gained in completing a minimum of 75 points of first year subjects. |
| **Non Allowed Subjects:** | Students who have completed 'A history of Nature' under the codes 136-035, 136-335, 672-317 or HPSC30005 are not permitted to enrol in this subject. |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. |
| **Subject Overview:** | This subject traces some of the changes in scientific thought about our environment in the western world over the last 500 years. As Europeans spread out from their continent in the fifteenth century, they discovered new environments that challenged their received wisdom about themselves and their relationship to nature. We will trace developments in emerging natural sciences such as astronomy, natural history, evolutionary biology, geology and ecology. Case studies will be drawn from the Europe and its colonies and focus on questions relating to the shape of the universe, the classification of organisms, animal rights, acclimatisation, evolution, eugenics, and sustainable living. This subject should be of interest to students who would like to learn more about the origins of the environmental sciences and our ongoing attempts to live within a changing environment. |
| **Objectives:** | Students who successfully complete this subject will:<br>• demonstrate a knowledge of changes in scientific thought about |

nature that have occurred in the western world over the last 500 years.
- demonstrate an awareness of the explanations given by historians for these new scientific understandings.
- gain experience in independent research by:

  o learning how to read and interpret documents and various other kinds of historical sources,
  o by developing an understanding of key scientific and philosophical concepts,
  o by critiquing arguments made by different historians,
  o by drawing and defending your own conclusions,
  o and by gaining a correct knowledge of the documentation and citation techniques used in the writing of history.

**Assessment:** A document exercise of 1000 words 20% due 25th January 2010, a research essay of 3000 words 70% due 8th February 2010, class participation and contribution 10%. This subject has a minimum hurdle requirement of 75% tutorial attendance. Regular participation in tutorials is required. Assessment submitted late without an approved extension will be penalised at 10% per day. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject.

**Prescribed Texts:** A reading pack will be available for purchase from the University Book Shop.

# HPSC20009 Cybersociety

**Credit Points:** 12.50

**Level:** 2 (Undergraduate)

**Commencement Date & Location:** 2011, Parkville
This subject commences in the following study period/s:
Semester 1 - Taught on campus.
Standard

**Time Commitment:** Contact Hours: 2.5 (1 x 1 hour lecture and 1 x 90 minute tutorial/practical session per week.)
Total Time Commitment: An average of 8.5 hours each week.

**Prerequisites:** None.

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| **Corequisites:** | None. |
| **Recommended Background Knowledge:** | Knowledge gained in the completion of 75 points of first year subjects from any area. |
| **Non Allowed Subjects:** | Students who have completed 'Cybersociety' under the codes 136-205, 136-305, 672-325 or HPSC30001 are not permitted to enrol in this subject. |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. |
| **Subject Overview:** | In this subject students will engage in a study of high-technology in a social and cultural context, and will examine critical issues which lie at the intersection of the social and the technical. Topics covered include cybernetics, cyberspace, cyborgs and other "cybers", social networking systems, virtual lives and virtual communities, the information economy, privacy and surveillance, digital convergence, multimedia and hypermedia, and techno-utopian and dystopian visions. Students will participate in theoretical work and "hands-on" experience. Students who successfully complete this subject should be able to critically analyse and evaluate controversial issues relating to technology in the social context, argue credible positions in relation to these controversies, and be able to identify and draw upon the major theoretical and methodological discourses through which the relationship between technology and society might be understood. |
| **Objectives:** | Students who successfully complete this subject should<br>• critically analyse and evaluate controversial issues relating to information systems in a social context, and argue credible positions in relation to these controversies.<br>• identify and draw upon the major theoretical and methodological discourses through which the relationship between information systems and society might be understood.<br>• form judgements based on a critical evaluation of conflicting arguments. |

- develop skills in both written and oral communication.

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| **Assessment:** | An essay of 2000 words 50% (due at the end of semester), an essay of 1000 words 25% (due in week 4), a seminar presentation of 800 words 20% (due throughout the semester) and contribution to an online discussion 5% (due throughout the semester). This subject has a minimum hurdle requirement of 75% tutorial attendance. Regular participation in tutorials is required. Assessment submitted late without an approved extension will be penalised at 10% per day. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject. |
| **Prescribed Texts:** | A subject reader will be available for purchase from the University Book Shop. |

# HPSC20010 Intimacy and Technology

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| **Credit Points:** | 12.50 |
| **Level:** | 2 (Undergraduate) |
| **Commencement Date & Location:** | 2011, Parkville<br>This subject commences in the following study period/s:<br>Semester 2 - Taught on campus.<br>Standard |
| **Time Commitment:** | Contact Hours: 2.5 (1x1 hour lecture and a 90 minute tutorial per week)<br>Total Time Commitment: An average of 8.5 hours each week. |
| **Prerequisites:** | None. |
| **Corequisites:** | None. |
| **Recommended Background Knowledge:** | Knowledge gained in the completion of 75 points of first year studies in any area. |
| **Non Allowed Subjects:** | Students who have completed 'Intimacy and Technology' under the codes 136-209 or 672-328 are not permitted to enrol in this subject. |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for |

this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements.

**Subject Overview:**

Intimate Technologies are those that we use to understand ourselves, and that we use to establish and maintain our relations with others. The subject approaches intimacy and technology through a wide variety of examples and case studies - technologies that mediate family life (home architecture), technologies of modesty and privacy (underwear and bedrooms), technologies of surveillance (CAT scans and bar-codes), communications technologies (love letters and SMS), reproductive technologies (IVF and sheep-gut), technologies that mediate personal identity (the data-body and flesh-fashion), and that mediate social and community relations (swarms and networks). The unifying themes that run through these examples approach technologies of intimacy in terms of their propensity to mediate, reorder and reframe our intimate relations, and students are invited to critically assess this argument. In so doing, students will gain a fresh and critical understanding of the ways in which technologies and our lives are intertwined.

**Objectives:**

A student who has successfully completed this subject will

- understand and critically interpret the major theoretical and philosophical approaches that inform our knowledge of sociotechnical relations.
- demonstrate a critical appreciation of the implications of particular sociotechnologies for self, and for human relations.
- identify, interpret and recount sociotechnical case studies relevant to intimate relations.

**Assessment:**

A 2500-word essay 50% (due at the end of semester), a 1000-word essay 30% (due in week 4) and a 500-word seminar presentation 20% (due during the semester).This subject has a minimum hurdle requirement of 75%. Regular participation in tutorials is required. Assessment submitted late without an approved extension will be penalised at 10% per day. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject.

**Prescribed Texts:** A subject reader will be available from the bookshop at the start of semester

**Recommended**

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| **Texts:** | Bauman, Zygmunt (2003), Liquid love: on the frailty of human bonds, Cambridge, UK: Polity Press. |

# HPSC20015 Astronomy in World History

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| **Credit Points:** | 12.50 |
| **Level:** | 2 (Undergraduate) |
| **Commencement Date & Location:** | 2011, Parkville<br>This subject commences in the following study period/s:<br>Semester 2 - Taught on campus.<br>Standard |
| **Time Commitment:** | Contact Hours: 3 (2x 1 Hour Lectures and 1x 1 hour tutorial each week.)<br>Total Time Commitment: An average of 9 hours each week. |
| **Prerequisites:** | None |
| **Corequisites:** | None. |
| **Recommended Background Knowledge:** | None. |
| **Non Allowed Subjects:** | Students who have completed 136-288, 136388 or HPSC30008 'Astronomy: The Universe in World History' are not permitted to enrol in this subject. |
| **Core Participation Requirements:** | For the purposes of considering request for Reasonable Adjustments under the disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. |
| **Subject Overview:** | In many cultures the study of celestial phenomena has taken a central role in the attempts to understand their surroundings. The apparent regularity of sun, moon and stars enabled observers to formulate rules for the behaviour of celestial bodies and derive predictions from them. Consequently, astronomy has not only become the oldest field in the systematic study of nature, it gives an opportunity to compare these studies among different |

civilizations. This subject investigates the development of astronomical thought in various cultures ranging from East and South Asia via the Middle East and Europe to Latin America. Central questions will be: How were the same phenomena interpreted in different cultures? How was the relation between sun, moon and earth regarded? How were astronomical observations done? What functions did astronomy have in culture? How was astronomical knowledge transmitted in cultural exchanges? Why did early modern Europe become the place that developed the idea of modern science? What was the relevance of the heliocentric planetary system - with the earth revolving around the sun - in this development? The subject will thus give an overview of the genesis of our modern world view while offering reflections on cross-cultural studies of science.

**Objectives:**

Students who successfully complete this subject will:

- understand central developments in the history of astronomical thought.
- comprehend the complex relation between the cultural foundations of science and the study of natural phenomena.
- appreciate the cultural differences in the study of nature while being able to assume a comparative perspective.
- demonstrate the ability to analyse complex problems in great depth.

**Assessment:**

One 2000 word essay 50 % (due during semester) and a 20 minute oral examination 50 % (during the examination period). This subject has a minimum hurdle requirement of 75% tutorial attendance. Regular participation in tutorials is required. Assessment submitted late without an approved extension will be penalised at 10% per day. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject.

**Prescribed Texts:** A subject reader will be available for purchase from the University Book Shop at the start of semester.