136-207 Philosophy of Biology

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	This subject is not offered in 2009.
Time Commitment:	Contact Hours: A 1.5-hour lecture and a 1 hour tutorial per week Total Time Commitment: 2.5 contact hours per week, 6 additional hours per week. 8.5 hours total.
Prerequisites:	Usually 75 points of first year study across any discipline area.
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Contact:	Assoc Prof Helen Verran hrv@unimelb.edu.au
Subject Overview:	Is biology a unique and autonomous science? Or are biological issues and theories adequately dealt with by using the epistemological and ontological framework of the physical sciences? Do Kuhnian revolutions occur in the biological sciences? How are the functionalist biological sciences that study physiology and cellular processes linked to and/or distinct from the historical or evolutionary biological sciences? These are some of the questions considered in this subject. Discussion of such general issues is interspersed with case studies which might include study of the work of Robert Brown - an early 19th century taxonomist; consideration of the procedures adopted by the mid twentieth century metabolic biochemist, Hans Krebs; and the conditions that led to the rise of molecular biochemistry and genomics in the second half of the twentieth century.
Objectives:	Students who successfully complete this subject should... # develop facility with the core concepts of evolutionary theory; # understand the philosophical issues arising out of evolutionary theory; # develop the ability to assess claims about the social significance of contemporary biological research; # understand the effects of social, ethical, and cultural context on scientific theorising.
Assessment:	A 2000 word essay 50% (due mid-semester) and a 2-hour exam 50% (in the examination period).
Prescribed Texts:	What Makes Biology Unique? Considerations on the Autonomy of a Scientific Discipline (Enrst Mayr), Cambridge University Press 2004 Further readings will be available on-line through the subject LMS website
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2009/J07)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04)**

	# **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2009/R01)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2009/355-AA)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	# Develop analytic and critical reading skills # Develop skills in making oral presentations and in analytic writing
Notes:	Students enrolled in the BSc (pre-2008 degree only), or a combined BSc course (except for the BA/BSc) will receive science credit for the completion of this subject.
Related Majors/Minors/ Specialisations:	History & Philosophy of Science History & Philosophy of Science Major History and Philosophy of Science History and Philosophy of Science Logic and Philosophy of Science Philosophy Major