HPSC30028 Philosophy of Biology

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus. Standard
Time Commitment:	Contact Hours: One 1 hour lecture and one 90 minute seminar per week Total Time Commitment: An average of 8.5 hours each week.
Prerequisites:	Usually 75 points of first year study across any discipline area.
Corequisites:	None
Recommended Background Knowledge:	There is no specific background knowledge required for enrolment in this subject.
Non Allowed Subjects:	This subject was previously available at 2nd level under the code 136-207. Students who have completed 136-207 are not eligible to enrol in this subject.
Core Participation Requirements:	For the purposes of considering requests 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. Further details on the disability support scheme can be found at the Disability Liaison Unit website : http://www.services.unimelb.edu.au/disability/
Contact:	Associate Professor Helen Verran (http://www.pasi.unimelb.edu.au/hps/staff/verran/)
	hrv@unimelb.edu.au (mailto:hrv@unimelb.edu.au)
Subject Overview:	hrv@unimelb.edu.au (mailto:hrv@unimelb.edu.au) Is biology a unique and autonomous science? Or are biological issues and theories adequately dealt with by using the framework developed for 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 pursued through 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.
Subject Overview: Objectives:	hrv@unimelb.edu.au (mailto:hrv@unimelb.edu.au)Is biology a unique and autonomous science? Or are biological issues and theories adequately dealt with by using the framework developed for 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 pursued through 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.Students who successfully complete this subject should# Develop new appreciation of biological concepts through recognising the historical and philosophical circumstances of their emergence # Develop the capacity for critical analysis of a theoretical approach to examining biological sciences as systems of knowledge and practice.
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Subject Overview: Subject Overview: Objectives: Assessment: Prescribed Texts:	hrv@unimelb.edu.au (mailto:hrv@unimelb.edu.au) Is biology a unique and autonomous science? Or are biological issues and theories adequately dealt with by using the framework developed for 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 pursued through 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. Students who successfully complete this subject should # Develop new appreciation of biological concepts through recognising the historical and philosophical circumstances of their emergence # Develop new appreciation of biological concepts through recognising the historical and philosophical circumstances of their emergence # Develop the capacity for critical analysis of a theoretical approach to examining biological sciences as systems of knowledge and practice. A 2000 word essay 50% (due mid-semester) and a 2-hour exam 50% (in the examination period). A subject reader with key texts will be available from the bookshop. Further readings will be available on-line through the subject LMS website.
Subject Overview: Subject Overview: Objectives: Objectives: Assessment: Prescribed Texts: Recommended Texts:	hrv@unimelb.edu.au (mailto:hrv@unimelb.edu.au) Is biology a unique and autonomous science? Or are biological issues and theories adequately dealt with by using the framework developed for 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 pursued through 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. Students who successfully complete this subject should # Develop new appreciation of biological concepts through recognising the historical and philosophical circumstances of their emergence # Develop the capacity for critical analysis of a theoretical approach to examining biological sciences as systems of knowledge and practice. A 2000 word essay 50% (due mid-semester) and a 2-hour exam 50% (in the examination period). A subject reader with key texts will be available from the bookshop. Further readings will be available on-line through the subject LMS website. What Makes Biology Unique? Considerations on the Autonomy of a Scientific Discipline (Enrst Mayr), Cambridge University Press 2004

	 # Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2010/B-BMED) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2010/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2010/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2010/B-MUS) # Bachelor of Science (https://handbook.unimelb.edu.au/view/2010/B-SCI) # Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2010/B-SCA) 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:	Students who successfully complete this subject should: # Develop analytic and critical reading skills # Develop skills in analytic writing
Links to further information:	http://www.pasi.unimelb.edu.au/hps/
Notes:	Students enrolled in the BSc (pre-2008 degree only) should enrol in 136-307.
Related Majors/Minors/ Specialisations:	History & Philosophy of Science History and Philosophy of Science History and Philosophy of Science History and Philosophy of Science Major Philosophy Philosophy Philosophy Major