

HPSC30035 Knowledge in the Making

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 24 hours - 1 x 2 hour seminar each week for 12 weeks Total Time Commitment: 170 hours
Prerequisites:	At least 2 HPS subjects at level 2 or equivalent (in philosophy, sociology or history).
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>
Coordinator:	Dr Kristian Camilleri
Contact:	Email: kcam@unimelb.edu.au (mailto:kcam@unimelb.edu.au)
Subject Overview:	<p>Questions about the nature of knowledge have long been central to both the history and philosophy of science. Yet over the past two decades, several new perspectives have emerged which have deepened our understanding of the process by which, and historical conditions under which, scientific knowledge is shaped and generated. These new perspectives, which signify a turn to 'scientific practice', draw on fields such as social and historical epistemology, the sociology of knowledge and cultural anthropology. In exploring the dynamics of scientific change, this subject draws on case studies from the history of physics, chemistry, geology, archaeology, biology and medicine since 1750. Here we examine such questions as: What constitutes the discovery of a new entity? How did the concept of the gene function in biology when there was no agreement on what genes were? To what extent did laboratory and field science emerge as distinctive epistemic cultures during the nineteenth century? How did the introduction of new symbolic tools transform fields like organic chemistry and theoretical physics? How did changing socio-political conditions lead to the emergence of new ways of conceptualizing disease and heredity? Can political values play a legitimate role in the construction of scientific theories and models?</p>
Learning Outcomes:	<p>Students who successfully complete this subject will:</p> <ul style="list-style-type: none"> # become familiar with a range of different historical, philosophical, and sociological approaches to understanding the process of scientific inquiry; # develop an appreciation of the social, historical and cultural contexts which shape the construction of scientific knowledge; # develop the ability to engage in critical analysis of texts, through synthesizing and distinguishing between, a variety of arguments and ideas; # gain the necessary critical acumen and relevant knowledge to be able to engage confidently and intelligently in contemporary debates in the history and philosophy of science;

	# develop an ability to conduct independent critical research at third year level.
Assessment:	Three 600 word assignments, due during the semester (15% each) A 2200 word essay, due at the end of semester (55%) Hurdle Requirements: Students must attend a minimum of 75% of tutorials in order to pass this subject. All pieces of written work must be submitted to pass this subject. Note: Assessment submitted late without an approved extension will be penalised at 10% per day. After five working days late assessment will not be marked. In-class tasks missed without approval will not be marked.
Prescribed Texts:	Subject readings will be available online
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2016/B-BMED) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/B-MUS) # Bachelor of Science (https://handbook.unimelb.edu.au/view/2016/B-SCI) # Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2016/B-ENG) <p>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.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Links to further information:	http://hps.unimelb.edu.au/
Notes:	This is the Capstone subject for the major in History and Philosophy of science. All students undertaking the major in History and Philosophy of science must enrol in this subject - normally in their final semester of enrolment.
Related Majors/Minors/Specialisations:	<p>Graduate Certificate in Arts - History and Philosophy of Science Graduate Diploma in Arts - History and Philosophy of Science History and Philosophy of Science Knowledge and Learning</p>