

HPSC30034 The Rise of Modern Science, 1500-1750

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	This subject is not offered in 2013. Standard
Time Commitment:	Contact Hours: 3 (2x 1 hour lectures each week and 1x 1 hour tutorial for 11 weeks) Total Time Commitment: An average of 9 hours each week
Prerequisites:	None.
Corequisites:	None.
Recommended Background Knowledge:	A minimum of 75 points of first year study is necessary.
Non Allowed Subjects:	Students who have completed 136-217 or 161-350 Science: Revolutions and Evolutions 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. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Contact:	Dr Gerhard Wiesenfeldt (http://hps.unimelb.edu.au/about/staff/wiesenfeldt/) gerhardw@unimelb.edu.au (mailto:gerhardw@unimelb.edu.au)
Subject Overview:	<p>Between 1500 and 1750 science emerged as the central intellectual field to interpret the natural world in early modern Europe. This process has had a crucial role for the development of modern society.</p> <p>It was intertwined with other fundamental changes in European culture, politics, and economy, such as the emergence of new forms of government, the protestant reformation, the invention of the printing press or the building of colonial empires. This subject examines the causes, the dynamics and the consequences of the processes that produced the social activity we call science. Focusing on a few paradigmatic cases, we will study the changes in scientific thought and practice - such as the introduction of the experimental method, the turn to mechanical philosophy and Copernican Astronomy - and their relation to social, political and religious developments. We will also discuss the way these processes have been analysed in the past and which explanations have been put forward, why science emerged in early modern Europe and not in other places or other eras. Students who complete this subject will gain an understanding into the processes that made science an integral part of modern society and the way historians can describe the development of science.</p>
Objectives:	<p>Students who successfully complete this subject will</p> <ul style="list-style-type: none"> # have a profound knowledge of important methods to analyse the historical development of science. # understand the complex dynamics of epistemological and cultural factors contributing to changes in science. # comprehend the historical dimension of their own knowledge. # be able to examine critically intellectual positions and their development.
Assessment:	One 2000 word essay 50% (due during the semester) and an oral examination 50% (during the examination period). Hurdle requirement: students must attend a minimum of 75% of tutorials in order to pass this subject. Assessment submitted late without an approved extension will be penalised at 10% per day; after five working days no late assessment will be marked. 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 University bookshop at the beginning of semester.
Recommended Texts:	<p>Peter Dear, <i>Revolutionizing the Sciences: European Knowledge and Its Ambition, 1500-1700</i>. Second edition, Princeton 2009.</p> <p>Margaret Osler, <i>Reconfiguring the World: Nature, God, and Human Understanding from the Middle Ages to Early Modern Europe</i>. Baltimore: Johns Hopkins University Press, 2010</p>
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/2013/B-BMED) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2013/B-COM) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2013/B-ENVS) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2013/B-MUS) # Bachelor of Science (https://handbook.unimelb.edu.au/view/2013/B-SCI) # Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2013/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
Generic Skills:	<p>Students who successfully complete this subject will</p> <ul style="list-style-type: none"> # develop skills in written and oral communication. # conduct independent research. # make appropriate use of primary sources and secondary literature in mounting an argument. # form defensible judgments on the basis of a critical evaluation of conflicting arguments. # put their own position in a historical perspective.
Links to further information:	http://hps.unimelb.edu.au/
Related Majors/Minors/Specialisations:	<p>History and Philosophy of Science History and Philosophy of Science History and Philosophy of Science History and Philosophy of Science (pre-2008 Bachelor of Science) History and Philosophy of Science Major Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses</p>
Related Breadth Track(s):	Understanding the Development of Science