136-388 Astronomy: The Universe in World History

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: Two 1-hour lectures and a 1-hour tutorial per week Total Time Commitment: 3 contact hours/week, 7 additional hours/week. Total of 10 hours per week.
Prerequisites:	Two second-year HPS subjects.
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
Coordinator:	Dr Gerhard Wiesenfeldt
Contact:	Dr Gerhard Wiesenfeldt gerhardw@unimelb.edu.au
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.
Objectives:	Students who have successfully completed this course 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:	Two 2000 word essays 30% each (one due mid semester, the other due at the end of semester) and an oral examination 40% (during the examination period).

Prescribed Texts:	A subject reader will be available for purchase from the University Book Shop.
Recommended Texts:	John North, The Fontana History of Astronomy and Cosmology. London 1994.
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:	# engage in critical reflection about the past and its connection to the present; # assess the diversity of cultural developments; # develop skills in written and oral communication; # conduct independent research; # make appropriate use of primary and secondary sources in mounting an argument; # form defensible judgements based on a critical evaluation of conflicting evidence.
Notes:	Students who have completed either 136-028 or 136-101 are not eligible to enrol in this subject. Students cannot gain credit for both this subject and HPSC20015 (History of Astronomy) . Only available at science third year; for other levels see HPSC20015 (History of Astronomy). This subject is based on 136-288 but involves additional work. This subject is available for science credit for students enrolled in the BSc (pre-2008 degree only), or a combined BSc course (except for the BA/BSc).
Related Majors/Minors/ Specialisations:	History & Philosophy of Science History and Philosophy of Science