

## HPSC30008 Astronomy in World History Science 3

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| Credit Points:                       | 12.50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |  |         |                            |                |                                      |            |       |
| Level:                               | 3 (Undergraduate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |  |         |                            |                |                                      |            |       |
| Dates & Locations:                   | This subject is not offered in 2011. Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |  |         |                            |                |                                      |            |       |
| Time Commitment:                     | Contact Hours: 3 (2x 1 Hour Lectures and 1x 1 hour tutorial each week.) Total Time Commitment: An average of 9 hours each week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                |  |         |                            |                |                                      |            |       |
| Prerequisites:                       | at least two of the following subjects (25 points) must be completed before enrolling in HPSC30008:<br>HPSC20001 Darwinism<br>HPSC20010 Intimacy and Technology<br>HPSC20020 God and the Natural Sciences<br>HPSC20002 A History of Nature<br>PHIL20001 Science, Reason and Reality<br>HPSC20009 Cybersociety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |  |         |                            |                |                                      |            |       |
| Corequisites:                        | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |  |         |                            |                |                                      |            |       |
| Recommended Background Knowledge:    | Knowledge gained in completion of at least two subjects (25 points) of second year subjects in Hisotory and Philosophy of Science.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                |  |         |                            |                |                                      |            |       |
| Non Allowed Subjects:                | Students who have completed 136-288, 136-388,672-333 or HPSC20015 Astronomy: The Universe in World History, are not permitted to enrol in this subject. <table><tr><td>Subject</td><td>Study Period Commencement:</td><td>Credit Points:</td></tr><tr><td>HPSC20015 Astronomy in World History</td><td>Semester 2</td><td>12.50</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |  | Subject | Study Period Commencement: | Credit Points: | HPSC20015 Astronomy in World History | Semester 2 | 12.50 |
| Subject                              | Study Period Commencement:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Credit Points: |  |         |                            |                |                                      |            |       |
| HPSC20015 Astronomy in World History | Semester 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 12.50          |  |         |                            |                |                                      |            |       |
| 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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |  |         |                            |                |                                      |            |       |
| Contact:                             | <b><u>Dr Gerhard Wiesenfeldt</u></b> ( <a href="http://www.pasi.unimelb.edu.au/hps/staff/wiesenfeldt/">http://www.pasi.unimelb.edu.au/hps/staff/wiesenfeldt/</a> )<br><b><u>gerhardw@unimelb.edu.au</u></b> ( <a href="mailto:gerhardw@unimelb.edu.au">mailto:gerhardw@unimelb.edu.au</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |  |         |                            |                |                                      |            |       |
| 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 of science. |                |  |         |                            |                |                                      |            |       |
| Objectives:                          | Students who successfully complete this subject will:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                |  |         |                            |                |                                      |            |       |

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|                                               | <ul style="list-style-type: none"> <li># understand central developments in the history of astronomical thought.</li> <li># comprehend the complex relation between the cultural foundations of science and the study of natural phenomena.</li> <li># appreciate the cultural differences in the study of nature while being able to assume a comparative perspective.</li> <li># demonstrate the ability to analyse complex problems in great depth.</li> </ul>                                                                                        |
| <b>Assessment:</b>                            | Two 2000 word essays 30% each (one due mid semester, the other due at the end of semester) and a 20 minute oral examination 40% (during the examination period). This subject has a minimum hurdle requirement of 75% tutorial attendance. Regular participation in tutorials is required. In-class tasks missed without approval will not be marked. All pieces of written work must be submitted to pass this subject.                                                                                                                                 |
| <b>Prescribed Texts:</b>                      | A subject reader will be available for purchase from the University Book Shop at the start of semester.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Recommended Texts:</b>                     | John North, <i>Cosmos: An Illustrated History of Astronomy and Cosmology</i> , Chicago: University of Chicago Press, 2008                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Breadth Options:</b>                       | This subject is not available as a breadth subject.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Fees Information:</b>                      | Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Generic Skills:</b>                        | <p>Students who successfully complete this subject will:</p> <ul style="list-style-type: none"> <li># engage in critical reflection about the past and its connection to the present.</li> <li># assess the diversity of cultural developments.</li> <li># develop skills in written and oral communication.</li> <li># conduct independent research.</li> <li># make appropriate use of primary and secondary sources in mounting an argument.</li> <li># form defensible judgements based on a critical evaluation of conflicting evidence.</li> </ul> |
| <b>Links to further information:</b>          | <a href="http://www.pasi.unimelb.edu.au/hps/">http://www.pasi.unimelb.edu.au/hps/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Notes:</b>                                 | This subject is only available to pre 2008 science students for credit at third year level. 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. This subject is based on HPSC20015 but involves additional work. This subject is not available as Breadth for new Gen students.                                                                                                                                                        |
| <b>Related Majors/Minors/Specialisations:</b> | History and Philosophy of Science (pre-2008 Bachelor of Science)<br>Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses                                                                                                                                                                                                                                                                                                                                                                                                  |