

# PHYC10008 From the Solar System to the Cosmos

<b>Credit Points:</b>	12.5
<b>Level:</b>	1 (Undergraduate)
<b>Dates &amp; Locations:</b>	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 3 x one hour lectures per week; 28 hours of practical work (8 x three hour workshops including practical work and up to 30 minutes of pre-workshop activity). Total Time Commitment: Estimated total time commitment of 170 hours
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	Mathematics and Science at Year 10 level as a minimum.
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;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.&lt;/p&gt; &lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>
<b>Coordinator:</b>	Prof Rachel Webster
<b>Contact:</b>	Prof. Rachel Webster r.webster@unimelb.edu.au 8344 5450
<b>Subject Overview:</b>	This subject will explore all aspects of the universe we live in from our solar system to the Milky Way and beyond. It will focus on why human beings have become interested in the extra-terrestrial world, and how they have explored it. In particular, the subject will explore the ideas of modern cosmology, with an up-to-date discussion of the latest discoveries. Important basic concepts in Mathematics and Science will be taught as required.
<b>Learning Outcomes:</b>	To enable students to understand the basic structure of the universe we live in, and to develop their capacity to: <ul style="list-style-type: none"> <li># cultivate an appreciation and understanding of the scientific method of enquiry, particularly as applied to astronomical questions</li> <li># explore and understand the major unresolved questions: What is dark matter? What is dark energy? Is there life on other planets?</li> <li># understand and explain key objects in the universe, such as stars, galaxies, cosmology and solar systems</li> <li># learn and use basic scientific and mathematical ideas to explain the formation and evolution of these objects</li> </ul>
<b>Assessment:</b>	Ongoing assessment of practical work during the semester (25%); ten weekly assignments (15%); a mid-semester test (10%); a 2-hour written examination in the examination period (50%).
<b>Prescribed Texts:</b>	The Cosmic Perspective 6 th Ed Bennett, Donahue, Schneider, Voit, Pearson Education Inc.

<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <b>Bachelor of Arts</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-ARTS">https://handbook.unimelb.edu.au/view/2015/B-ARTS</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-COM">https://handbook.unimelb.edu.au/view/2015/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-ENVS">https://handbook.unimelb.edu.au/view/2015/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2015/B-MUS">https://handbook.unimelb.edu.au/view/2015/B-MUS</a>)</li> </ul> <p>You should visit <b>learn more about breadth subjects</b> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<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>A student who completes this subject should be able to:</p> <ul style="list-style-type: none"> <li># explain their understanding of scientific principles and applications lucidly, both in writing and orally;</li> <li># participate as an effective member of a group in laboratory and study groups;</li> <li># think independently and analytically, and direct his or her own learning; and</li> <li># manage time effectively in order to be prepared for regular practical classes, tests and the examination.</li> </ul>
<b>Related Majors/Minors/ Specialisations:</b>	<p>Science-credited subjects - new generation B-SCI and B-ENG.</p> <p>Selective subjects for B-BMED</p>