PHYC10008 From the Solar System to the Cosmos

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	This subject is not offered in 2013. Lectures and practice classes.
Time Commitment:	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 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	Mathematics and Science at Year 10 level as a minimum.
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 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:	Prof. Rachel Webster r.webster@unimelb.edu.au 8344 5450
Subject Overview:	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.
Objectives:	To enable students to understand the basic structure of the universe we live in, and to develop their capacity to: # cultivate an appreciation and understanding of the scientific method of enquiry, particularly as applied to astronomical questions # explore and understand the major unresolved questions: What is dark matter? What is dark energy? Is there life on other planets? # understand and explain key objects in the universe, such as stars, galaxies, cosmology and solar systems # learn and use basic scientific and mathematical ideas to explain the formation and evolution of these objects
Assessment:	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%).
Prescribed Texts:	The Cosmic Perspective 6 th Ed Bennett, Donahue, Schneider, Voit, Pearson Education Inc.
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2013/B-ARTS)** # **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)** 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:	A student who completes this subject should be able to: # explain their understanding of scientific principles and applications lucidly, both in writing and orally; # participate as an effective member of a group in laboratory and study groups; # think independently and analytically, and direct his or her own learning; and # manage time effectively in order to be prepared for regular practical classes, tests and the examination.
Related Majors/Minors/ Specialisations:	Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.