

## 600-261 Life, Earth & Universe 2

<b>Credit Points:</b>	12.50
<b>Level:</b>	2 (Undergraduate)
<b>Dates &amp; Locations:</b>	This subject is not offered in 2009. Lectures, practicals, workshops, field trip.
<b>Time Commitment:</b>	Contact Hours: Three 1-hour lectures per week, one 2-hour practical per week for ten weeks; six 1-hour workshops through the semester; a field trip across one weekend of semester. Total Time Commitment: 120 hours total time commitment
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. This subject includes a field trip. Students who feel their disability may impact upon their participation are encouraged to discuss this with the subject coordinators and the Disability Liaison Unit.
<b>Subject Overview:</b>	<p>A multi-disciplinary approach is required to understand the most profound questions about life on Earth, and the possibility of life elsewhere in the universe.</p> <p>Students will be required to demonstrate that they have a basic knowledge of astronomy, earth sciences and biology for entry into the course. This subject will specifically explore the possibility of life developing at other locations in the universe. This will include the latest results in the search for extra-terrestrial planets, and the possibility of water on these planets; extremophiles; and an exploration of prebiotic chemistry and the synthesis of organic material.</p> <p>The subject will include a major field trip, to explore a particular site within Australia, and a panel discussion, with key Australian experts to discuss scientific speculations about the nature of extraterrestrial life.</p>
<b>Objectives:</b>	<p>The subject aims to consolidate and develop students' ideas on life in the universe, based around the disciplines of biology, chemistry, geology and earth sciences.</p> <p>At the end of the subject students should be able to answer questions such as:</p> <ul style="list-style-type: none"> <li># How will the universe evolve?</li> <li># How will we find planets with life?</li> <li># How will life evolve on those planets?</li> </ul>
<b>Assessment:</b>	Ongoing assessment of workshop/laboratory classes (2.5% per session, totalling 25%); an essay of 1500 words (20%); an oral presentation (5%); a 2-hour written examination in the examination period (50%).
<b>Prescribed Texts:</b>	None
<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/2009/D09">https://handbook.unimelb.edu.au/view/2009/D09</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2009/F04">https://handbook.unimelb.edu.au/view/2009/F04</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2009/A04">https://handbook.unimelb.edu.au/view/2009/A04</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2009/M05">https://handbook.unimelb.edu.au/view/2009/M05</a>)</li> </ul> <p>You should visit <a href="http://breadth.unimelb.edu.au/breadth/info/index.html">learn more about breadth subjects (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>	On completion of this subject, students should have developed the following generic skills: <ul style="list-style-type: none"><li># quantitative skills, including working with powers of ten, ratios and computer models;</li><li># experimental skills developed in biology, astronomy and earth sciences laboratories;</li><li># the ability to use the scientific method to think through problems critically.</li><li># the ability to critically research materials and prepare a logically argued written case.</li></ul>
<b>Notes:</b>	This subject is available for science credit to students enrolled in the BSc (both pre-2008 and new degrees), BAsc or a combined BSc course.  There will be a compulsory field trip across one weekend during the semester.