

## BOTA30002 Plant Evolution

<b>Credit Points:</b>	12.5									
<b>Level:</b>	3 (Undergraduate)									
<b>Dates &amp; Locations:</b>	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.									
<b>Time Commitment:</b>	Contact Hours: 2 x one hour lectures per week, 36 hours practical work during the semester, one-day excursion Total Time Commitment: Estimated total time commitment of 170 hours									
<b>Prerequisites:</b>	One of <table border="1" data-bbox="387 573 1485 779"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BOTA20002 Plant Biodiversity</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>BOTA20004 Flora of Victoria</td> <td>February</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	BOTA20002 Plant Biodiversity	Semester 2	12.50	BOTA20004 Flora of Victoria	February	12.50
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BOTA20002 Plant Biodiversity	Semester 2	12.50								
BOTA20004 Flora of Victoria	February	12.50								
<b>Corequisites:</b>	None									
<b>Recommended Background Knowledge:</b>	None									
<b>Non Allowed Subjects:</b>	None									
<b>Core Participation Requirements:</b>	For the purposes of considering applications for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005) and Students Experiencing Academic Disadvantage Policy, this subject requires all students to actively and safely participate in practical work. Students who feel their disability may impact upon their participation are encouraged to discuss this with the Subject Coordinator and the Disability Liaison Unit. <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>									
<b>Coordinator:</b>	Dr Mike Bayly									
<b>Contact:</b>	<a href="mailto:mbayly@unimelb.edu.au">mbayly@unimelb.edu.au</a> (mailto:mbayly@unimelb.edu.au)									
<b>Subject Overview:</b>	<p>This subject will introduce the general principles and modern methods of plant evolutionary biology: how to discover the phylogeny (relationships) of organisms using both morphological characters and molecular (DNA) data; how to use this information to improve the classification systems of plants; how to study aspects of evolution, coevolution and historical biogeography; and how to integrate information from living and fossil plants to discover the past and date evolutionary events. Examples of the diversity and evolution of Australian plants - both fossil and living forms - will be used throughout this subject. Topics will include:</p> <ul style="list-style-type: none"> <li># discovering plant relationships phylogenetic systematics;</li> <li># evolution of vascular plants, especially flowering plants;</li> <li># fossil history of land plants;</li> <li># historical biogeography and evolution of Australian flora.</li> </ul>									
<b>Learning Outcomes:</b>	<p>At the completion of the subject, students should:</p> <ul style="list-style-type: none"> <li># have a knowledge of modern methods of phylogenetic systematics, including the application of morphological and molecular data</li> <li># have skills in analysing systematic data, including the use of computer interactive programs;</li> <li># understand how to infer evolutionary and biogeographic patterns;</li> </ul>									

	# have a knowledge of the evolution and diversity of Australian flora.
<b>Assessment:</b>	A 2000 word practical report (20%) due during the semester; a 15-minute oral presentation and 1000 word written report (20%) at the end of semester; a 3-hour written examination in the examination period (60%).
<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/2016/B-ARTS">https://handbook.unimelb.edu.au/view/2016/B-ARTS</a>)</li> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-COM">https://handbook.unimelb.edu.au/view/2016/B-COM</a>)</li> <li># <b>Bachelor of Environments</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-ENVS">https://handbook.unimelb.edu.au/view/2016/B-ENVS</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2016/B-MUS">https://handbook.unimelb.edu.au/view/2016/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>Notes:</b>	<p>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.</p> <p>Previously known as 606-303 Systematics of Plants and Fungi (prior to 2008)</p> <p>Previously known as Botany Systematics and Evolution (prior to 2005)</p>
<b>Related Majors/Minors/Specialisations:</b>	<p>Botany</p> <p>Botany</p> <p>Botany</p> <p>Botany</p> <p>Botany (pre-2008 Bachelor of Science)</p> <p>Ecology and Evolutionary Biology</p> <p>Genetics</p> <p>Plant Science</p> <p>Science-credited subjects - new generation B-SCI and B-ENG.</p> <p>Selective subjects for B-BMED</p>