

# Botany

| <b>Year and Campus:</b>                           | 2016  |                |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
|---|---|----------------|----------------------------|----------------|-------------------------|----------|-------|---------------------------|------------|-------|--|------------|-------|--|------------|-------|---|------------|-------|
| <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>Overview:</b>                                  | The Graduate Certificate allows students who have completed an undergraduate degree to re-focus or expand their body of knowledge by completing the requirement of one of the undergraduate majors (or equivalent) in the Bachelor of Science not already completed. The Graduate Certificate provides a pathway to the Master of Science Streams.  |                |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| <b>Learning Outcomes:</b>                         | <p>Students who complete the Graduate Certificate should:</p> <ul style="list-style-type: none"> <li># Demonstrate an independent approach to knowledge that uses rigorous methods of inquiry and appropriate theories and methodologies that are applied with intellectual honesty and a respect for ethical values;</li> <li># Apply critical and analytical skills and methods to the identification and resolution of problems;</li> <li># Act as informed and critically discriminating participants within the community of scholars, as citizens and in the work force;</li> <li># Communicate effectively;</li> <li># Commit to continuous learning;</li> <li># Be proficient in the use of appropriate modern technologies, such as the computer and other information technology systems, for the acquisition, processing and interpretation of data.</li> </ul> <p>-</p> <p><b>Core participation requirements:</b> Fieldwork, practicals and laboratory experiments</p> <p>This discipline requires all students to actively, independently and safely participate in all practical classes, utilising a range of observational, communication, motor, intellectual, and behavioural and social skills. Visual acuity, muscle coordination and balance are essential for participation. Details of the participation requirements can be found at <a href="http://www.vet.unimelb.edu.au/docs/CoreParticipationReqsBSc.pdf">http://www.vet.unimelb.edu.au/docs/CoreParticipationReqsBSc.pdf</a> (<a href="http://www.vet.unimelb.edu.au/docs/CoreParticipationReqsBSc.pdf">http://www.vet.unimelb.edu.au/docs/CoreParticipationReqsBSc.pdf</a>)</p> <p>The sites essential to this fieldwork are not wheel chair accessible and may require students to traverse broken ground. Students are also required to undertake experiments including specimen and microscope work with assessment reliant on careful observation and visual interpretation of results. Practical may also involve handling and working with animals.</p> |                |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| <b>Structure &amp; Available Subjects:</b>        | Students must complete 50 points of study at Level 3.   |                |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| <b>Subject Options:</b>                           | <p><b>Subject prerequisites:</b> at least three level 2 or above Animal Science Biology, Botany, Anatomy, Physiology, Biochemistry and Molecular Biology, Ecology, Genetics subjects, or equivalent.</p> <p><b>Level 3</b></p> <p>Four of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>BOTA30001 Marine Botany</td> <td>November</td> <td>12.50</td> </tr> <tr> <td>BOTA30002 Plant Evolution</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>BOTA30003 Environmental Plant Physiology</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>BOTA30004 Vegetation Management and Conservation</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>BOTA30005 Plant Molecular Biology &amp; Biotechnology</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table>   | Subject        | Study Period Commencement: | Credit Points: | BOTA30001 Marine Botany | November | 12.50 | BOTA30002 Plant Evolution | Semester 2 | 12.50 | BOTA30003 Environmental Plant Physiology | Semester 1 | 12.50 | BOTA30004 Vegetation Management and Conservation | Semester 2 | 12.50 | BOTA30005 Plant Molecular Biology & Biotechnology | Semester 2 | 12.50 |
| Subject   | Study Period Commencement:  | Credit Points: |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| BOTA30001 Marine Botany                           | November  | 12.50          |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| BOTA30002 Plant Evolution                         | Semester 2  | 12.50          |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| BOTA30003 Environmental Plant Physiology          | Semester 1  | 12.50          |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| BOTA30004 Vegetation Management and Conservation  | Semester 2  | 12.50          |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |
| BOTA30005 Plant Molecular Biology & Biotechnology | Semester 2  | 12.50          |                            |                |                         |          |       |                           |            |       |  |            |       |  |            |       |   |            |       |

|                                      |   |                  |       |
|--------------------------------------|---|------------------|-------|
|                                      | BOTA30006 Field Botany  | January          | 12.50 |
|                                      | BOTA30007 Marine Phytoplankton of Australia   | Not offered 2016 | 12.50 |
| <b>Links to further information:</b> | <a href="http://graduate.science.unimelb.edu.au/">http://graduate.science.unimelb.edu.au/</a> |                  |       |
| <b>Related Course(s):</b>            | Graduate Certificate in Science   |                  |       |