

## 220-302 Tree Growth and Ecophysiology

<b>Credit Points:</b>	12.50
<b>Level:</b>	3 (Undergraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: Twenty-four hours lectures and 36 hours practical work Total Time Commitment: Not available
<b>Prerequisites:</b>	202-201 Plant Function or 606-201 Plant Structure and Function; 202-203 Soil and Water Resources.
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<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>	Assoc Prof Gerd Bossinger
<b>Subject Overview:</b>	<p>Subject content includes:</p> <ul style="list-style-type: none"> <li># life cycles and tree development;</li> <li># molecular aspects of wood, and the effect of genetics and silviculture on wood quality;</li> <li># flowering and tree developmental responses to environmental stresses;</li> <li># ecophysiology of water and nutrient use, tree performance and environmental constraints on tree growth, interactions between light, water, nutrients and genetic capacity in limiting growth;</li> <li># management of the interaction between light, water and nutrients to maximise carbon gain (growth) in planted trees;</li> <li># current tools for measurement of physiological performance;</li> <li># nutrient cycling in native forests and plantations, gas exchange and the C and N economies; and</li> <li># process-based models for forest growth.</li> </ul>
<b>Assessment:</b>	A 3-hour end-of-semester examination (50%), and two project reports totalling 3000 words (50%).
<b>Prescribed Texts:</b>	None
<b>Recommended Texts:</b>	# <b>Plant Physiological Ecology</b> (H Lambers, F S Chapin and T L Pons), Springer, 1998

<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><u>Bachelor of Arts</u></b> (<a href="https://handbook.unimelb.edu.au/view/2009/D09">https://handbook.unimelb.edu.au/view/2009/D09</a>)</li> <li># <b><u>Bachelor of Commerce</u></b> (<a href="https://handbook.unimelb.edu.au/view/2009/F04">https://handbook.unimelb.edu.au/view/2009/F04</a>)</li> <li># <b><u>Bachelor of Environments</u></b> (<a href="https://handbook.unimelb.edu.au/view/2009/A04">https://handbook.unimelb.edu.au/view/2009/A04</a>)</li> <li># <b><u>Bachelor of Music</u></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 <b><u>learn more about breadth subjects</u></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>	Information Not Available
<b>Related Course(s):</b>	Bachelor of Forest Science