

220-504 Trees, Genes & Environment

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: March, - Taught on campus. Intensive teaching mode
Time Commitment:	Contact Hours: Twenty-four hours lectures and 36 hours practical work delivered over two week teaching block. Total Time Commitment: Not available
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>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.</p> <p>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: http://services.unimelb.edu.au/disability</p></p>
Coordinator:	Assoc Prof Gerd Bossinger
Subject Overview:	<p>The molecular revolution is increasingly affecting the way we understand and manage our natural systems.</p> <p>This subject delivers a detailed examination of the developmental and molecular basis of tree growth, with specific focus on wood formation and tolerance to environmental stress. In this subject students will explore how this knowledge can be applied in forested land management to support tree improvement and ecosystem management.</p> <p>The practical component aims to provide students with exposure to a sub-set of molecular and microscopic technical skills including the use of botanical micro-techniques and the more common molecular tools. Technical and socio-economic challenges will be critically discussed and evaluated.</p> <p>This subject has been designed to target students with forestry, land management, science and biochemistry backgrounds, but will be invaluable for any student who wishes to expand their understanding of the role trees play in terrestrial ecosystems.</p>
Objectives:	<p>On completion of this subject, students should:</p> <ul style="list-style-type: none"> • have a good understanding of tree development and wood formation; • have a basic understanding of plant molecular biology; • appreciate the molecular basis of tree morphology, development and anatomy; • know about methods for and implications of biotechnological modification of tree characteristics; • understand molecular aspects of biodiversity; • comprehend the importance of environmental triggers in tree development; • understand the importance of the application of modern approaches in forest management and research;

	<ul style="list-style-type: none"> • be familiar with the most recent developments in tree biotechnology and its application.
Assessment:	Two assignments (3000 words each, total 80%), one oral presentation (20%).
Prescribed Texts:	None
Recommended Texts:	A comprehensive list of relevant articles in the primary literature will be made available on the LMS
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Links to further information:	http://www.forests.unimelb.edu.au/subjects.html
Related Course(s):	Master of Forest Ecosystem Science