



“Life used to be simpler”

220414 Silviculture and Forest Dynamics

“The discipline of silviculture appears to be at a crossroads. Silviculturalists are being challenged to develop practices that sustain the full function and dynamics of forested ecosystems and maintain ecosystem diversity and resilience while still providing wood products.” Puettmann *et. al.* (2008)

These thoughts indicate the new challenge for students of silviculture. The specific challenges will differ for the various plantation and native forest types, but we are living in a more complex world and there is a need for new and effective solutions.

This subject provides the means for developing these solutions. It presents the science of growth and development of trees and stands as it affects the production of different forest goods and environmental services. The subject covers the principles and practices of forest establishment and regeneration and the management of different forest types and plantations for a range of objectives such as water, wildlife habitat or timber production.

Topics covered

- the dynamics and growth of forests and different stages of stand development.
- the effects of site, climatic and soil factors and interactions among species on forest stand development and productivity
- the manipulation of forestry structure and dynamics to achieve specific management objectives
- the design of silvicultural management practices for specific situations and products using modern modelling tools.

Subject coordinators

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2009 Study Dates and Locations

- Intensive teaching over 10 days from 17th – 28th August at the Creswick Campus
- Study materials will be available from early August via the Learning Management System
- Subject assessments due by the end of September 2008

Teaching plan

This subject will be taught using a combination of lectures, practical exercises, a field visits and projects. Contact time will be equivalent to 24 hours of lectures and 36 hours of practical work.

Where possible, operations managers and practitioners will contribute by providing guest lectures and demonstrations.

The subject will include a number of afternoon field visits to local forest sites.

The first week of the subject will focus on native forests and the second week on plantation forests.

Student costs

In addition to tuition fees, on-campus accommodation options for two weeks in Creswick range from \$170 - \$190

Enrolment options

- This subject is normally offered through the Master of Forest Ecosystem Science but is available to students from other courses subject to their Course Coordinator's approval.
- The subject may also be taken as an individual subject through the University's Community Access Program (CAP). This may be in assessed or non-assessed mode. For further information see: <http://www.unimelb.edu.au/community/access/> or contact forests-info@unimelb.edu.au

Further information

Information about this subject and the Master of Forest Ecosystem Science is available at: <http://www.forests.unimelb.edu.au>

