FRST90015 Forest Ecosystems

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2014. This subject is taught intensively, on campus, from 10 - 21 February 2014. Assessment period from 11 February - 15 April 2014. The subject involves several field trips including an overnight field trip from the Creswick Campus.
Time Commitment:	Contact Hours: 50 hours of lectures, practicals, and field exercise over a two-week intensive teaching block. Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Contact:	**Melbourne School of Land & Environment Student Centre** Ground Floor, Melbourne School of Land & Environment (building 142) *Enquiries* Phone: 13 MELB (13 6352) Email: **13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)**
Subject Overview:	An introduction to the forests and woodlands of southeastern Australia based on lectures and field visits to forests across a broad rainfall gradient. The subject aims to provide a sound theoretical and practical understanding of the major ecosystem processes in forests, including a focus on regeneration and recovery following both low- and high-intensity fire. Field visits to mallee, box-ironbark, *Eucalyptus* open forests and cool temperate rainforest and associated practical work will ensure that students obtain direct experience of a range of forest ecosystems. These field visits and associated lectures develop knowledge of state-of-the-art methods to analyze ecosystem processes, such as nutrient and carbon cycling, and also a functional appreciation of forest soils.
Learning Outcomes:	By the end of the subject students should: # Understand the ecosystem paradigm including energy flow, organic and inorganic transformation processes in forests # Have a broad understanding of relationships among vegetation types, climate and soils within forest ecosystems of south-eastern Australia # Understand the relevance of forests and forest soils in the global carbon cycle and the amelioration of global climate change # Have gained practical experience in the quantitative analysis of forest biomass, decomposition and respiration processes involved in nutrient and carbon cycling within forests, and between forest ecosystems and the atmosphere # Be capable of critically evaluating management impacts on forest ecosystem processes maintaining water, air and soil quality.
Assessment:	Practicals based on field and group work- 20%, Literature review assignment (up to 2000 words) - 30%, Major assignment (up to 3500 words) - 50%.
Prescribed Texts:	Costermans, L. Native Trees and Shrubs of South-Eastern Australia OR Costermans, L. Trees of Victoria and Adjoining Areas

Recommended Texts:	Attiwill P.M & Adams M.A, (editors) *Nutrition of Eucalypts*
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.land-environment.unimelb.edu.au/future-students/grad/forest-ecosystem-science.html
Related Course(s):	Master of Forest Ecosystem Science Master of Urban Horticulture Postgraduate Certificate in Bushfire Management Postgraduate Certificate in Bushfire Planning and Management Postgraduate Diploma in Bushfire Management Postgraduate Diploma in Bushfire Planning and Management Postgraduate Diploma in Forest Systems Management
Related Majors/Minors/ Specialisations:	Honours Program - Forest Science Sustainable Forests Sustainable Forests Tailored Specialisation Tailored Specialisation