220-416 Forest Hydrology & Catchment Management

Credit Points:	12.500
Level:	Graduate/Postgraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus. Intensive teaching mode at the Creswick Campus
Time Commitment:	Contact Hours: 24 hours lectures and 36 hours practical work delivered in two one-week blocks. Block will be separated by 4 to 6 weeks. Total Time Commitment: 100 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 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. 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
Coordinator:	Assoc Prof L Bren
Subject Overview:	On completion of this subject students should have a detailed understanding of the hydrologic cycle and its impact on society, be familiar with the possible changes in water values that can be changed by land management, and the costs and benefits of such changes to society, be aware of the hydrologic, social, political, and economic factors involved in matters of catchment management, and have some feeling for the level of inaccuracy involved in hydrologic measurements. Content includes: # hydrologic cycle and "randomness" inherent in it; # surface water flows and surface water modelling; # groundwater flow and groundwater modelling; # water quality and its measurement; # impacts of land use on water quality and quantity; # salinity and its impacts on native rivers and streams; # principles of catchment management; # questions of water rights and water trading; # water use conflicts and their resolution; # restoration hydroecology; and # long-term variations in stream flow. The subject will draw heavily on Australian examples, and will involve an overnight excursion to the River Murray area
Assessment:	One end of semester exam 50% Two assignments each 25% (each 2000 words)
Prescribed Texts:	None

Recommended Texts:	Chang, M (2006) Forest hydrology: an introduction to water and forests. Boca Raton: CRC/ Taylor & Francis, 2006.
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 Agricultural Science