

## NRMT90029 Fundamentals of Catchment Management

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2013, Hawthorn This subject commences in the following study period/s: Semester 2, Hawthorn - Taught on campus. Intensive Mode
<b>Time Commitment:</b>	Contact Hours: 32 hours including field work Total Time Commitment: 120 hours total time commitment
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	For the purposes of considering requests 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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
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<b>Subject Overview:</b>	<p>This subject is concerned with providing students with a common starting point across the range of physical, biological, chemical, social and institutional processes that bear on catchment behaviour. The subject structure uses past, current and foreseeable issues facing catchment managers to introduce the concepts of catchments as physical, biological, chemical, social and institutional systems. Subject content covers the principles of:</p> <ul style="list-style-type: none"> <li># geomorphology,</li> <li># hydrology,</li> <li># hydraulics,</li> <li># ecology and</li> <li># water quality in sufficient detail to understand the main processes that control the condition of: <ul style="list-style-type: none"> <li>• catchments,</li> <li>• waterways,</li> <li>• floodplains and</li> <li>• wetlands.</li> </ul> </li> </ul> <p>Content also explores the institutional and social context of catchment management to understand the constraints on management intervention and the notion of ecosystem services as a driver of management intervention. Approaches to management intervention consider the multiple goals of catchment management and the concept of "management levers".</p> <p>The structured remote learning component deals with the objectives of natural resources management and institutional and legislative frameworks and introduces the range of relevant catchment processes. A four day intensive face to face session focuses on the knowledge</p>

	needed to understand catchments as interacting systems and illustrates limitations on management intervention options through consideration of past, current and future catchment issues. As part of this subject, students undertake a component of the overall course project, examining a catchment management issue from their workplace to identify the physical, biological, chemical, social and institutional processes that guide or constrain management intervention.
<b>Objectives:</b>	On the successful completion of this subject students will: <ul style="list-style-type: none"> <li># recognise institutional, social and economic opportunities and constraints including river health policy and practice and the roles and responsibilities of catchment management agencies;</li> <li># understand the technical content of the disciplines involved in catchment management and its relationship to the broader objective of river health and total catchment management;</li> <li># understand catchments as interacting systems; and</li> <li># use the concept of “management levers” to simplify management intervention options.</li> </ul>
<b>Assessment:</b>	Contributions to pre-intensive forum discussions (10 percent) Thirty minute multiple choice test on the institutional and legislative frameworks (5 percent) Tutorial exercises during the intensive phase (10 percent) Group “management levers” exercise. Equivalent to 1,000 words each plus participation (20 percent) Individual project report(s) equivalent to a 4,000-word assignment (50 percent) 500 word (equivalent) ongoing critique of the subject's relevance to the key natural resources management principles (5 percent) Students will be required on commencement of the subject to sign a statement (in hard copy) that they undertake that all work submitted will be their own, that they understand they may be required to take an examination in the subject if there is any doubt as to the authenticity of their assessed work, and that they understand plagiarism and/or collusion are the basis for disciplinary action.
<b>Prescribed Texts:</b>	A study guide and a book of readings is provided to students
<b>Recommended Texts:</b>	Please refer to website
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<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>Links to further information:</b>	<a href="http://www.mccp.unimelb.edu.au/courses/award-courses/graduate-certificate/river-health">http://www.mccp.unimelb.edu.au/courses/award-courses/graduate-certificate/river-health</a>
<b>Related Course(s):</b>	Graduate Certificate in River Health Management