

# GEOG30004 Fluvial Geomorphology

<b>Credit Points:</b>	12.50												
<b>Level:</b>	3 (Undergraduate)												
<b>Dates &amp; Locations:</b>	This subject is not offered in 2014.												
<b>Time Commitment:</b>	Contact Hours: one 2-hour lecture per week, three 3-hour practicals, two 1-day field trips and one 2-day field trip. Total Time Commitment: Not available												
<b>Prerequisites:</b>	<p>Completion of 25 points of second/third year subjects from Geography, Environments, Environmental Engineering or Earth Sciences.</p> <p>OR</p> <p>Completion of ONE of the following subjects:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>GEOG20009 Landscapes and Diversity</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>GEOG20002 Understanding Global Landforms</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>GEOG30022 River Ecology &amp; Ecosystem Management</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>OR</p> <p>Permission from the subject coordinator (ie for candidates with professional or other relevant experience).</p>	Subject	Study Period Commencement:	Credit Points:	GEOG20009 Landscapes and Diversity	Semester 2	12.50	GEOG20002 Understanding Global Landforms	Semester 1	12.50	GEOG30022 River Ecology & Ecosystem Management	Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:											
GEOG20009 Landscapes and Diversity	Semester 2	12.50											
GEOG20002 Understanding Global Landforms	Semester 1	12.50											
GEOG30022 River Ecology & Ecosystem Management	Semester 1	12.50											
<b>Corequisites:</b>	None												
<b>Recommended Background Knowledge:</b>	Completion of <i>GEOG20002 Understanding Global Landforms</i> ; <i>GEOG20009 Landscapes and Diversity</i> or <i>GEOG30022 Rivers: Hydrology and Ecology</i> is recommended. Candidates with other relevant experience (including professional experience) will also be considered.												
<b>Non Allowed Subjects:</b>	None												
<b>Core Participation Requirements:</b>	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: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>												
<b>Contact:</b>	<p><b>Melbourne School of Land &amp; Environment Student Centre</b> Ground Floor, Melbourne School of Land &amp; Environment (building 142)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Email: <a href="mailto:13MELB@unimelb.edu.au">13MELB@unimelb.edu.au</a> (<a href="mailto:13MELB@unimelb.edu.au">mailto:13MELB@unimelb.edu.au</a>)</p>												
<b>Subject Overview:</b>	Fluvial Geomorphology is the study of rivers as physical systems and their role in shaping the surface of the earth. Students who complete the subject will not only see the landscape with new eyes, but they will have knowledge and skills essential for anyone interested in the management of rivers for environmental purposes. We will emphasise a strong process-based approach based on sediment transport and deposition, coupled with examination of modern stream channel change in the light of climate and land use changes over the last two million years. The course will provide an understanding of how and why the variety of natural rivers comes about, including the unique streams of Australia.												
<b>Learning Outcomes:</b>	At the end of the course, students will be expected to have developed an understanding of the processes of river management. Students will have developed the following:												

	<ul style="list-style-type: none"> <li># an understanding of how river systems develop within catchments;</li> <li># an understanding of how the form of a river is controlled by processes operating over a catchment;</li> <li># an understanding of how hydrology and sediment transport combine to control erosion and deposition; and</li> <li># an understanding of how changes in the supply of water and sediment due to climate change or human intervention leads to channel changes.</li> </ul>
<b>Assessment:</b>	Two minor fieldtrip reports (1000 words each; 25% each, due mid semester). A literature report of 750 words (15%, due late semester). A major fieldtrip report of 1750 words (35%, due at end of semester).
<b>Prescribed Texts:</b>	Fluvial Forms and Processes: A New Perspective (D Knighton), Arnold 1998
<b>Recommended Texts:</b>	Stream Hydrology: an Introduction for Ecologists (ND Gordon et al), John Wiley & Sons, 2 nd Edition, 2004
<b>Breadth Options:</b>	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> <li># <b>Bachelor of Commerce</b> (<a href="https://handbook.unimelb.edu.au/view/2014/B-COM">https://handbook.unimelb.edu.au/view/2014/B-COM</a>)</li> <li># <b>Bachelor of Music</b> (<a href="https://handbook.unimelb.edu.au/view/2014/B-MUS">https://handbook.unimelb.edu.au/view/2014/B-MUS</a>)</li> </ul> <p>You should visit <b>learn more about breadth subjects</b> (<a href="http://breadth.unimelb.edu.au/breadth/info/index.html">http://breadth.unimelb.edu.au/breadth/info/index.html</a>) and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.</p>
<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>Generic Skills:</b>	<p>Upon successful completion of this subject, students will have acquired the following skills:</p> <ul style="list-style-type: none"> <li>• spatial analysis (three-dimensional interpretation);</li> <li>• management of complex natural systems;</li> <li>• linking in theoretical terms; and</li> <li>• competence in writing consultancies and journal entries.</li> </ul>
<b>Notes:</b>	Students enrolled in the BSc (both pre-2008 degree and new degrees), or a combined BSc course (except for the BA/BSc) may receive science credit on the completion of this subject.
<b>Related Majors/Minors/Specialisations:</b>	<p>Environmental Geographies, Politics and Cultures major          Environments Discipline subjects          Geography          Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses          Science-credited subjects - new generation B-SCI and B-ENG.          Selective subjects for B-BMED</p>