ERTH90034 Advanced Hydrogeology

Credit Points:	6.25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: May, Parkville - Taught on campus. This subject is taught through the Victorian Institute of Earth and Planetary Sciences: https://vieps.earthsci.unimelb.edu.au/.
Time Commitment:	Contact Hours: 16 hours lectures, 16 hours of pracs and 8 hours of fieldwork Total Time Commitment: 85 hours
Prerequisites:	One of: **Subject** / **Study Period Commencement:** / **Credit Points:** ERTH30001 Hydrogeology/Environmental Geochemistry — Semester 1 — 12.5 GEOL90005 Hydrogeology/Environmental Geochemistry — Semester 1 — 12.5 or equivalent.
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 Kevin Walsh
Contact:	kevin.walsh@unimelb.edu.au
Subject Overview:	Course content includes: Physical Hydrogeology, Chemical Hydrogeology, Field Study/Methods and Management and Assessment.
Learning Outcomes:	# This subject aims to equip students with discipline-specific knowledge and expertise appropriate for post-graduate research in the field; equip students with discipline-specific knowledge and expertise enabling them to take their place as professional geologists in industry or government organisations; # determine the distribution, movement and quality of groundwater using conventional and emerging approaches/technologies; # evaluate groundwater flow, storage, recharge and discharge, in the context of resource management, by applying appropriate tests; # assess chemical and biogeochemical factors affecting the composition and evolution of groundwater chemistry;

	# apply knowledge obtained from the course to addressing problems of importance to the minerals and/or water resources industry (e.g. mine tailings dams, contaminant plume mitigation, etc.).
Assessment:	Submission of 4 equally weighted practical exercises collectively equivalent to 1,000 words, to be completed by the last day of classes (40%) Completion of a written examination equivalent to 1,500 words, to be completed by the last day of classes (60%)
Prescribed Texts:	Reading expected to be completed in the pre-teaching period.
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
Related Course(s):	Master of Geoscience Master of Science (Earth Sciences)
Related Majors/Minors/ Specialisations:	Earth Sciences Honours Program - Earth Sciences