

GEOL90043 Fundamentals of Geological CO2 Storage

Credit Points:	6.25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: September, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 20 hours lectures and 20 hours practicals Total Time Commitment: 85 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	A science degree and/or related industry experience recommended
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>
Coordinator:	Assoc Prof Kevin Walsh
Contact:	kevin.walsh@unimelb.edu.au (mailto:kevin.walsh@unimelb.edu.au)
Subject Overview:	The assessment and development of deep subsurface CO2 I storage sites requires a diverse range of technical skills as well as a good understanding of regulatory and environmental protection requirements and objectives, and socio-political advocacy. This course comprises five days of lectures and practical exercises covering the workflow of technical / scientific assessments, discussing common problems and industry best-practice to achieve safe and secure geological storage of CO2. Following an introductory 'back-story' to carbon capture and carbon utilisation, the work flow will commence with basin and play scale analyses and rapidly focus onto portfolio management for storage site screening, storage site selection and site analysis for future appraisal and development operations.
Learning Outcomes:	<ul style="list-style-type: none"> • Understand the complete spectrum and work flow of geological storage site selection and analysis. • Identify and apply screening criteria for storage site selection and appraisal planning • Evaluate data gaps, uncertainties and risks and plan mitigating circumstances • Develop an awareness of the long term planning required to mature a site to the development stage • Understand the complex of multi-disciplinary skills brought to bear on the process • Access networks and resources to facilitate storage site evaluation and management.
Assessment:	Four equally weighted lecture/practical session written exercises collectively equivalent to 1000 words, due during the first four days of the teaching period (40%) Final written assignment equivalent to 1500 words, due one week after the last day of the teaching period (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
Generic Skills:	<ul style="list-style-type: none"># Exercise critical judgement;# undertake rigorous and independent thinking;# adopt a problem-solving approach to new and unfamiliar tasks;# develop high-level written report and/or oral presentation skills;# interrogate, synthesise and interpret the published literature;# work as part of a team.
Related Course(s):	Master of Geoscience Master of Science (Earth Sciences)
Related Majors/Minors/ Specialisations:	Earth Sciences Honours Program - Earth Sciences