GEOL90035 Geodynamics

Credit Points:	6.25		
Level:	9 (Graduate/Postgraduate)		
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: April, Parkville - Taught on campus.		
Time Commitment:	Contact Hours: 16 hours of lectures and 24 hours of practicals. Total Time Commitment: 85 hours		
Prerequisites:	Subject	Study Period Commencement:	Credit Points:
	COMP90059 Introduction to Python	February	6.25
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:	In this course you will gain a basic introduction to geodynamics and planetary physics. We will undertake an overview of the structure of all the solid planets of the solar system and the techniques used to probe their structure. You will learn about the evolutionary processes within the solid planets and moons of the solar system which produce the wealth of distinctive "geology" observed in planetary missions. You will appreciate the ubiquitous nature of geological processes, and the distinctive expression of those processes on each planetary body. You will have a good understanding of the continuum mechanics of slow deformation and the rheology of rocks and ice under planetary conditions. We will introduce the techniques of seismic imaging, and how to download information and begin the process of interpreting earthquake data.		
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; # an undetstanding of the fundamental preocesses that govern the geology of planetary bodies; # the use and interpretation of digital information to understand structural evolution.		
Assessment:	Multiple computer-based practicals collectively equivalent to 1000 words, due throughout the teaching period (45%) Assignment equivalent to 1500 words, due one week after the end of the teaching period (55%).		

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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:	# 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	

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