

GEOL90038 Igneous Geodynamics and Ore Deposits

Credit Points:	6.25
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: June, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 16 hours of lectures and 18 hours of practicals Total Time Commitment: 85 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	Knowledge of third-year geology strongly recommended
Non Allowed Subjects:	None
Core Participation Requirements:	<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>
Coordinator:	Assoc Prof Kevin Walsh
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Subject Overview:	The course will provide an overview of the geology of major Ni-Cu-(PGE) sulphide deposits, PGE deposits, and diamond deposits with an emphasis on the processes controlling their genesis and how this information can be applied in exploration. The course will also introduce some of the theoretical concepts involved in ore formation such as the factors controlling sulphur solubility in mafic magmas and the roles of partial melting and crustal contamination in the genesis of Ni-Cu-(PGE) sulfide deposits.
Learning Outcomes:	<ul style="list-style-type: none"> # 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; # employ geochemical and/or geochronological data to determine the relationships between magmatism, metamorphism, deformation and sedimentation; # understand the theoretical concepts of ore formation and the role of magmas; # to interpret and analyse samples to link theoretical concepts to exploration.
Assessment:	A group exercise and seminar equivalent to 500 words, due Day 5 (20%) Four equally weighted practical exercises collectively equivalent to 1000 words, due Days 1-4 (40%) 1 hour multiple choice exam, held on Day 5 (40%)
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