

Course Outline (Higher Education)

School:	School of Science, Engineering and Information Technology
Course Title:	FIELDWORK
Course ID:	SCGEO3104
Credit Points:	15.00
Prerequisite(s):	(SCGEO2103 or SX618) and (SCGEO2107 or SX629) and (SGCEO2102)
Co-requisite(s):	(SCGEO3102 or SX717)
Exclusion(s):	(SX719)
ASCED Code:	010703

Description of the Course :

This course provides students with the opportunity to further hone their geological mapping and interpretation skills in an area of complex geology. Students will also be given the opportunity to research an aspect of the geology in the area of interest and report to the group. This course is typically conducted over an intensive period of 1-2 weeks in the field.

Grade Scheme: Graded (HD, D, C, etc.)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Placement Component: No

Program Level:

AQF Level of Program						
	5	6	7	8	9	10
Level						
Introductory						
Intermediate						
Advanced			✓			

Learning Outcomes:

This advanced level field course provides students with the opportunity to further hone their geological mapping and interpretation skills in complex geological terrains. On completing this course, students will be able to:

Knowledge:

- K1.** Discuss the geology of a high grade, multiply deformed terrain.
- K2.** Explain the Metamorphic facies concept and isograd concept in a field context
- K3.** Describe the stratigraphy and a stratigraphic sequences of field areas

Course Outline (Higher Education)

SCGEO3104 FIELDWORK

K4. Relate metamorphic petrology, petrography and metamorphic assemblages in a field setting

Skills:

- S1.** Interpret small scale outcrop structures and their relationship to regional geology
- S2.** Operate safely in a remote field environment
- S3.** Work effectively in small groups in isolated areas
- S4.** Construct high quality maps based of field observations
- S5.** Communicate complex geological concepts relating to field areas to a range of audiences

Application of knowledge and skills:

- A1.** Produce high quality maps based on theoretical knowledge and field mapping
- A2.** Interpret outcrop-scale geology and relate to regional understanding
- A3.** Synthesise geological understanding and apply to new and novel situations

Course Content:

This course integrates all relevant knowledge and skills attained in the geology program

Topics may include:

- Principles of geological fieldwork at an advanced level
- Outcrop observations, recording and interpretation
- Metamorphic mineral assemblages
- Isograd mapping
- Field recording of structural data
- Researching past work of a region
- Economic geology of significant Australian deposits
- Structural geology concepts applied to highly deformed regions of the Earth`s crust

Values:

- V1.** Appreciate the importance of field observations and their recording
- V2.** Understand the importance of group cohesion working in remote locations and in close working groups
- V3.** Appreciate the importance of safety and environmental considerations

Graduate Attributes:

FedUni graduate attributes statement. To have graduates with knowledge, skills and competence that enable them to stand out as critical, creative and enquiring learners who are capable, flexible and work ready, and responsible, ethical and engaged citizens.

Attribute	Brief Description	Focus
Knowledge, skills and competence	Skills obtained facilitate lifetime learning in the field.	High
Critical, creative and enquiring learners	The geological field camp is often seen as the right of passage for geologists - limited supervision and self reliance are the major factors in this aspect.	High

Course Outline (Higher Education)

SCGEO3104 FIELDWORK

Attribute	Brief Description	Focus
Capable, flexible and work ready	Fieldwork skills are universally regarded highly by industry and prospective employers	Medium
Responsible, ethical and engaged citizens	Many facets from respect to landowners, leaseholders and the environment	Medium

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K3	Week 5 short test on prescribed reading	Written test. Short answer and multiple choice	10%
K1, K3, A1, A3, S5	Prepare and present talk on prescribed topic related to the field areas	Presentation on prescribed topic	20%
K1-K4, S1-S5, A1-A3, V1-V3	Field notes, field map and prepared final map	Report and map submission	50%
K1, K4, S5, A1, V1	Thin section preparations and petrographical reports.	Written reports	20%

Adopted Reference Style:

APA