



Course Outline (Higher Education)

Institute: Institute of Innovation, Science & Sustainability

Course Title: FIELDWORK PRINCIPLES AND PRACTICE

Course ID: SCGEO2107

Credit Points: 15.00

Prerequisite(s): (SCGEO1103 and SCGEO2111 and SCGEO2112)

Co-requisite(s): Nil

Exclusion(s): (SX629)

ASCED: 010703

Description of the Course:

Geology is a field-based science. This course provides intensive exposure to geological fieldwork. It includes an introduction to geological mapping and other techniques; and demonstration of the features of a classic geological region.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Work Experience:

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

Placement Component: No

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes:

At the completion of this course, students will be able to:

Knowledge:

K1. Explain the relationship between geological exposures at the surface and a geological map

- K2.** Interpret the third dimension from a geological map
- K3.** Synthesize the regional geology and the geological evolution of a geologically important area
- K4.** Observe and explain field geological relationships and communicate their importance in new and unique settings

Skills:

- S1.** Create a geological map of a moderately deformed region
- S2.** Construct and analyse a geological section
- S3.** Interpret geological histories and produce a geological report
- S4.** Compose accurate and comprehensive descriptions of rock outcrops to interpret the geology of a region

Application of knowledge and skills:

- A1.** Observe and interpret geological relationships and create a geological map in any moderately deformed region
- A2.** Explain geological observations and relate to theory
- A3.** Relate field observations to geological understanding of a given area to produce professional reports

Course Content:

Topics may include:

- Use of a geological compass
- Meaning of geological symbols and reading geological maps
- Use of topographic maps and aerial photographs
- Preparation of geological cross sections
- Field identification and description of rocks, minerals, fossils and structures.

Values:

- V1.** Appreciate their vulnerability in the field environment
- V2.** Appreciate that geological outcrops are a scarce resource requiring care

Graduate Attributes

The Federation University Federation graduate attributes (GA) are entrenched in the [Higher Education Graduate Attributes Policy](#) (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1, K2, K3, S1, S2, S4, A1, A2	1, 2, 4, 5, 6, 7

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K4	5
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	A3	1, 3
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	S3, A3	5
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	Not applicable	Not applicable

Learning Task and Assessment:

Inclement weather with concomitant road closures may affect the assessable tasks able to be delivered. If the programme is curtailed, the weightings for assessable tasks will have to be adjusted.

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K4, S4, A1, A2, V1, V2	Geological excursion	Attendance	S/U
K3	Literature review	Test(s)	S/U
V1	Remote-area safety	HIRAC	S/U
K1, K2, K3, K4, S1, S2, S3, S4, A1, A2, A3, V2	Geological mapping	Maps, cross-section, report	30-50%
K4, S4, A1, A2, V2	Descriptions of rock exposures in the field	Field notebook	15-35%
K1, K2, K3, S1, S2, S3, A1, A2, V2	Derive geologic maps, cross sections and geologic histories from outcrop maps	Class exercises	10-30%

Adopted Reference Style:

Other (Australian Journal of Earth Sciences)

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)