



# ENAR12016 *Earth Science*

## Term 1 - 2023

Profile information current as at 30/04/2024 05:55 pm

All details in this unit profile for ENAR12016 have been officially approved by CQUUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

This unit aims to provide students with knowledge of the structure, composition and mode of formation of the more common rock forming minerals, the classification of rock types and genesis of metallic and non metallic ores. You will gain an appreciation of geological time and a knowledge of the major geological processes that have sculptured and impacted Planet Earth since its formation. On completion of the unit, you will be able to define and identify the more common Earth Resources (minerals, ores, fossil fuels, soil and water), describe the geological processes which form them, and relate these processes to the unifying theory of Geology, Plate Tectonics. The principles of geoconservation, geoheritage and sustainability are introduced and embedded as themes throughout this unit.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 1 - 2023

- Mixed Mode

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Written Assessment**

Weighting: 25%

#### 2. **Practical Assessment**

Weighting: 30%

#### 3. **Group Work**

Weighting: 20%

#### 4. **Written Assessment**

Weighting: 25%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Lecturer and Industry feedback

**Feedback**

Add information on indigenous issues into the mining cycle lectures.

**Recommendation**

Develop new teaching resources on indigenous issues (Native Title, cultural awareness) for the mining cycle lectures and during fieldwork exercises.

#### Feedback from Student feedback

**Feedback**

Continue to provide tactile practical sessions during Residential School field and laboratory sessions.

**Recommendation**

Continue to update field and laboratory resources and equipment to use during Residential School fieldwork.

## Unit Learning Outcomes

### On successful completion of this unit, you will be able to:

1. Identify earth materials such as common rock forming minerals, rock types, ores, fuels and describe the processes that form them
2. Explain geological time and the methods used to determine age, stratigraphy and rate of earth processes
3. Relate geological processes and time to plate tectonics
4. Apply geological knowledge of rock types, geological time, earth processes and tectonics to create a geological history and simple geological map of a defined geographic area
5. Explain how human interaction with earth processes and materials can impact the environment
6. Prepare project reports and demonstrate an effective, professional level of teamwork and communication, and support collaborative peer group learning.

The Learning Outcomes for this unit are linked with the Engineers Australia Stage 1 Competency Standards for Professional Engineers in the areas of 1. Knowledge and Skill Base, 2. Engineering Application Ability and 3. Professional and Personal Attributes at the following levels:

Introductory 1.6 Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline. (LO: 1N 2N 3N 4N 5N 6N ) 2.3 Application of systematic engineering synthesis and design processes. (LO: 1N 2N 3N 4N 5N 6N ) 2.4 Application of systematic approaches to the conduct and management of engineering projects. (LO: 1N 2N 3N 4N 5N 6N ) 3.2 Effective oral and written communication in professional and lay domains. (LO: 1N 2N 3N 4N 5N 6N ) 3.3 Creative, innovative and pro-active demeanour. (LO: 5N )

Intermediate 1.1 Comprehensive, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline. (LO: 1N 2N 3N 4N 5I 6I ) 1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline. (LO: 1I 2I 3N 4N 5N 6I ) 1.4 Discernment of knowledge development and research directions within the engineering discipline. (LO: 1I 2I 3N 4N 5I 6N ) 1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline. (LO: 5I ) 2.1 Application of established engineering methods to complex engineering problem solving. (LO: 1N 2N 3N 4N 5I 6N ) 2.2 Fluent application of engineering techniques, tools and resources. (LO: 1N 2N 3N 4I 5I 6N ) 3.1 Ethical conduct and professional accountability. (LO: 1N 2N 4N 5I 6N ) 3.4 Professional use and management of information. (LO: 1N 2N 3N 4N 5I 6N ) 3.5 Orderly management of self, and professional conduct. (LO: 5I 6I ) 3.6 Effective team membership and team leadership. (LO: 1N 2N 3N 4N 5I 6N )

**Note:** LO refers to the Learning Outcome number(s) which link to the competency and the levels: N - Introductory, I - Intermediate and A - Advanced. Refer to the Engineering Undergraduate Course Moodle site for further information on the Engineers Australia's Stage 1 Competency Standard for Professional Engineers and course level mapping information <https://moodle.cqu.edu.au/course/view.php?id=1511>



## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Written Assessment - 25%	•		•			
2 - Practical Assessment - 30%	•	•				
3 - Group Work - 20%				•		•
4 - Written Assessment - 25%				•	•	

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Communication	•	•	•	•	•	•
2 - Problem Solving			•	•	•	•
3 - Critical Thinking	•	•	•	•	•	
4 - Information Literacy	•		•	•	•	•
5 - Team Work		•		•		•
6 - Information Technology Competence		•			•	•
7 - Cross Cultural Competence	•				•	•
8 - Ethical practice					•	•
9 - Social Innovation						
10 - Aboriginal and Torres Strait Islander Cultures						

## Textbooks and Resources

### Textbooks

ENAR12016

#### Prescribed

##### Mineral & Rock Kit

Edition: NA (NA)

NA

Binding: Other

ENAR12016

#### Prescribed

##### Rocks and Landscapes of the National Parks of Central Queensland

Edition: 1 (2006)

Authors: Willmott, W

Geological Society of Australia

Brisbane , Queensland , Australia

ISBN: <https://handbook.cqu.edu.au/facet/unit-profiles/profile/PHYG12003/2020/HT1#:~:te>

Binding: Paperback

#### Additional Textbook Information

Additional readings will be provided during lectures and tutorials.

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Zoom (both microphone and webcam capability)

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Andrew Hammond** Unit Coordinator

[a.hammond@cqu.edu.au](mailto:a.hammond@cqu.edu.au)

## Schedule

### Week 1 - 06 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"><li>• Lecture 1a: Introduction to Planet Earth &amp; Tectonics - 1</li><li>• Lecture 1b: Rock Forming Minerals - 1</li></ul>	<ul style="list-style-type: none"><li>• Textbook (Chernicoff &amp; Whitney): Chapters 1 &amp; 2; Appendices B &amp; D</li><li>• Links provided in Moodle.</li></ul>	<ul style="list-style-type: none"><li>• Practical 1: Rock-Forming Minerals</li><li>• Weekly Zoom Tutorial Session</li></ul>

### Week 2 - 13 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
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- Lecture 2a: Introduction to Planet Earth & Tectonics - 2
- Lecture 2b: Rock Forming Minerals - 2

- Textbook (Chernicoff & Whitney): Chapters 1 & 2; Appendices B & D
- Links provided in Moodle.

- Practical 2: Rock-Forming Minerals Continued
- Weekly Zoom Tutorial Session

### Week 3 - 20 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 3a: Intrusive Igneous Rocks &amp; Processes</li> <li>• Lecture 3b: Extrusive Igneous Rocks &amp; Processes</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapters 3 &amp; 4</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Practical 3: Igneous Rocks</li> <li>• Weekly Zoom Tutorial Session</li> </ul>

### Week 4 - 27 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 4a: Weathering &amp; Sedimentary Rocks</li> <li>• Lecture 4b: Sedimentary Rocks</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapters 5 &amp; 6</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Practical 4: Sedimentary Rocks</li> <li>• Weekly Zoom Tutorial Session</li> </ul>

### Week 5 - 03 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 5a: Metamorphism &amp; Metamorphic Rocks - 1</li> <li>• Lecture 5b: Metamorphism &amp; Metamorphic Rocks - 2</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapter 7</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Practical 5: Metamorphic Rocks</li> <li>• Weekly Zoom Tutorial Session</li> </ul>

### Vacation Week - Non Teaching Week - 10 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
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### Week 6 - 17 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 6a: Earth Structures - Folds, Faults &amp; Fabrics - 1</li> <li>• Lecture 6b: Earth Structures - Folds, Faults &amp; Fabrics - 2</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapter 9</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Practical 6: Introduction to Geological Maps &amp; Structures</li> <li>• Weekly Zoom Tutorial Session</li> </ul> <p><b>Field Guide to your local geology</b> Due: Week 6 Monday (17 Apr 2023) 11:59 pm AEST</p>

### Week 7 - 24 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 7a: Stratigraphy - Dating Techniques &amp; Geological Time - 1</li> <li>• Lecture 7b: Stratigraphy - Dating Techniques &amp; Geological Time - 2</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapter 9</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Practical 6: Introduction to Geological Maps &amp; Structures</li> <li>• Weekly Zoom Tutorial Session</li> </ul>

### Week 8 - 01 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
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- Compulsory Residential School Laboratory Practicals & Field Trips (02 to 05 May)
- Lecture 8a: Weathering & Soil/Regolith Formation - 1
- Lecture 8b: Weathering & Soil/Regolith Formation - 2

- Textbook (Willmott): Chapter 1
- Textbook (Chernicoff & Whitney): Chapter 5
- Links provided in Moodle.

Compulsory Residential School

- Distance Education students: 02 to 05 May (Please note that FULL DAY attendance is required each day to PASS this unit.
- Internal (ROK) Students: 04 to 05 May only if there are >10 enrolled INTERNAL (ROK) STUDENTS. If <10 internal (ROK) students, the Residential School will be run over full 4 days with the Distance Education students i.e. 02 to 05 May. Please note that FULL DAY attendance is required each day of the Residential School to PASS this unit.
- Introduction to Geological Maps & Structural Geology
- Practical Test during Residential School

**Practical Assessment** Due: Week 8 Wednesday (3 May 2023) 11:45 pm AEST

#### Week 9 - 08 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 9a: Groundwater/Hydrogeology</li> <li>• Lecture 9b: Groundwater/Hydrogeology</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapter 16</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly Zoom Tutorial Session</li> </ul> <p><b>Group Field Work</b> Due: Week 9 Friday (12 May 2023) 11:59 pm AEST</p>

#### Week 10 - 15 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 10a: Glaciers &amp; Ice Ages</li> <li>• Lecture 10b: Palaeoclimates &amp; Climate Change</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapter 17</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly Zoom Tutorial Session</li> </ul>

#### Week 11 - 22 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 11a: Natural Resources &amp; Economic Geology - 1</li> <li>• Lecture 11b: Indigenous perspectives and mining cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook (Chernicoff &amp; Whitney): Chapter 20</li> <li>• Links provided in Moodle.</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly Zoom Tutorial Session</li> </ul>

#### Week 12 - 29 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> <li>• Lecture 12a: Natural Resources &amp; Economic Geology - 2</li> <li>• Lecture 12b: Unit Summary &amp; Review</li> </ul>		<ul style="list-style-type: none"> <li>• Weekly Zoom Tutorial Session</li> </ul> <p><b>Field Trip Report</b> Due: Week 12 Friday (2 June 2023) 11:59 pm AEST</p>

#### Review/Exam Week - 05 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Field Guide to your local geology

**Assessment Type**

Written Assessment

**Task Description**

Task Description

This assessment is designed to test and apply your newly acquired rock and mineral identification skills in the real world i.e. the field situation, to source site-specific geological information and to hone your scientific report writing skills. The aim is to synthesize this information and to produce a high quality geological field guide.

## Scenario

You have been asked by your local Rotary Club, as the “geological expert”, to lead a field trip that will look at some geological features of interest in your local area. You are to produce a “Geological Field Guide” for participants.

This exercise may require some fieldwork within your local area.

HINT: Undertake an internet search to glean ideas from existing field guides in the published literature e.g. Australian Geological Society and other professional society field guides.

Further support material for this assessment task will be posted in Moodle along with some Exemplars. We will discuss this assessment item during the weekly in-class and on-line Zoom Tutorials and in Moodle Forums.

**Assessment Due Date**

Week 6 Monday (17 Apr 2023) 11:59 pm AEST

Submit electronically via Moodle with your name, unit code and assignment number i.e. NAME\_ENAR12016\_Assignment Title

**Return Date to Students**

Assignments will be returned within a fortnight once all have been submitted for assessment

**Weighting**

25%

**Minimum mark or grade**

To pass this course you must obtain a minimum mark of 40% for this assessment item and must obtain an overall passing grade (50% or greater) for ALL assessment items.

**Assessment Criteria**

You will be assessed on your ability to write a well researched, succinctly written and well illustrated scientific document. Please view the unit's Moodle site for the assessment criteria rubric associated with this assessment item. Carefully read the details outlined in the assessment criteria rubric before commencing the assessment item. Prior to finalizing your submission ensure that you check to see that you have addressed all of the assessment criteria outlined in the rubric.

Further discussion about your topic and the assessment criteria will be undertaken via in-class and online Zoom Tutorials, Moodle Forums and Posts.

**Referencing Style**

- [Harvard \(author-date\)](#)

**Submission**

Online

**Submission Instructions**

Please use the upload link in Moodle for online electronic assignment submission as a MICROSOFT WORD or PDF document. It is expected that you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as indicated. It is important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces the chances of omissions, losses and errors.

### Learning Outcomes Assessed

- Identify earth materials such as common rock forming minerals, rock types, ores, fuels and describe the processes that form them
- Relate geological processes and time to plate tectonics

## 2 Practical Assessment

### Assessment Type

Practical Assessment

### Task Description

The Practical Test (1.5 hour duration plus 5 minutes reading time) will test your mineral and rock identification skills and your geological map interpretation skills.

Distance Education students will undertake their Practical Examination during the second day (afternoon) of their Residential School. Distance Education students please bring your rock and mineral kits to the Residential School as we will be going over (revising) the practicals already attempted each week prior to the Residential School. If you have not attempted ALL of your practicals prior to the Residential School you will find it extremely difficult to pass your Practical Test.

Internal (ROK) students will undertake their Practical Examination during week 6 (time and venue to be advised in Moodle) if there are > 10 internally enrolled (ROK) students. If there are < 10 internally enrolled (ROK) students, these students will undertake the full 4 day Residential School ALONG WITH the Distance Education students and will undertake their Practical Examination ALONG WITH the Distance Education students.

### Assessment Due Date

Week 8 Wednesday (3 May 2023) 11:45 pm AEST

Submit offline with your name, unit code and assignment number i.e. NAME\_ENAR12016\_Assignment Title

### Return Date to Students

Practical Exam marks will be posted in Moodle within a fortnight once all have been submitted for assessment.

### Weighting

30%

### Minimum mark or grade

To pass this course you must obtain a minimum mark of 40% for this assessment item and must obtain an overall passing grade (50% or greater) for ALL assessment items.

### Assessment Criteria

You (individually) will be assessed on your:

- Ability to identify hand specimens of the more common rock-forming minerals by applying your newly acquired knowledge of their diagnostic properties and the key tests used in their characterization.
- Ability to classify igneous, metamorphic and sedimentary rocks
- Ability to interpret simple geological structures, geological successions and timing from geological and topographical maps
- Ability to read a geological map to make resource and environmental management decisions
- Ability to draw geological cross-sections
- Ability to operate some commonly used geological equipment e.g. geological compass, global positioning system, hand lens, tablet with geological software.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Offline

### Submission Instructions

Submission will be made offline with your name, unit code and assignment number i.e. NAME\_ENAR12016\_Assignment Title

## Learning Outcomes Assessed

- Identify earth materials such as common rock forming minerals, rock types, ores, fuels and describe the processes that form them
- Explain geological time and the methods used to determine age, stratigraphy and rate of earth processes

## 3 Group Field Work

### Assessment Type

Group Work

### Task Description

This assessment item is designed to test the recently acquired rock and mineral identification, rock classification and geological mapping skills of small groups of students (Group Work) in the natural setting, the field. The "Group Work" will take the form of a simple geological field mapping exercise (transects) over a defined geographic area using some basic geological instruments, tablets and software. The operation of these instruments and software will be demonstrated at the onset of the mapping exercise during the Residential School.

Further details pertaining to the mapping tasks will be demonstrated to the combined cohort of Internal (ROK) and Distance students during the field trip component of the Residential School (04 to 05 May). Each Group are to submit a combined or group report online for assessment via Moodle. It will take the form of a short written report, which includes maps, photographs and field sketches.

The type and nature of field mapping activities to be conducted is dependent upon a number of variables, namely weather conditions and accessibility to geo-sites on the day. Consequently, some changes to tasks may need to be made on the day/s of the field trip.

### Assessment Due Date

Week 9 Friday (12 May 2023) 11:59 pm AEST

Submit electronically via Moodle with your name, unit code and assignment number i.e. NAME\_ENAR12016\_Assignment Title

### Return Date to Students

Assignments will be returned within a fortnight once all have been submitted for assessment

### Weighting

20%

### Minimum mark or grade

To pass this course you must obtain a minimum mark of 40% for this assessment item and must obtain an overall passing grade (50% or greater) for ALL assessment items.

### Assessment Criteria

Each group will be assessed on it's ability to:

- Conduct a simple geological mapping exercise in the field by utilizing some basic geological tools e.g. geological compass, hand lens, an aerial base map, global positioning system, digital tablet with geological software, etc.
- Identify and classify the rocks and minerals observed at the delegated field mapping site/s
- Produce a geological map and cross sections based on the group's field observations and measurements
- Unravel the stratigraphic succession (rock record and history) at the designated field site/s and to relate this to Plate Tectonics theory.

Please note that some aspects of these criteria may be altered on the day due to unforeseen circumstances i.e. inclement weather conditions, tidal conditions, accessibility of geo-sites or other factors.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online Group

**Submission Instructions**

Please use the upload link on Moodle for online electronic assignment submission of your Group Work as a MICROSOFT WORD or PDF document. It is expected that you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as it is indicated. It is important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces the chances of omissions, losses and errors.

**Learning Outcomes Assessed**

- Apply geological knowledge of rock types, geological time, earth processes and tectonics to create a geological history and simple geological map of a defined geographic area
- Prepare project reports and demonstrate an effective, professional level of teamwork and communication, and support collaborative peer group learning.

## 4 Field Trip Report

**Assessment Type**

Written Assessment

**Task Description**

During the course of 2 days of field work (04 to 05 May) during the Residential School a number of sites of geological interest in the Rockhampton area will be visited. At each of these geo-sites you will be asked to make notes on the rocks and minerals encountered, their geological ages, the geological features observed and to take photographs and GPS positions for your records. This information will be recorded on Digital Tablets, CQU to provide, as well as in field notebooks.

The objective of this assessment item is for you (individually) to relate your field observations to the major geological events that have occurred in Central Queensland i.e. relate these geosites to the Central Queensland stratigraphic column of geological events in (see page 6 in Willmott, your text book). You will need to relate the rocks and landforms you encountered during your field work to their corresponding geological time periods. These, in turn, are to be related to geological events. This field information is to be placed into your field report, which each member of the class is to submit i.e. it's an individual assessment item.

Further details as to the tasks to be performed at each of the field sites visited will be outlined during the onset of the Residential School and during the duration of the field trips. Tasks may alter on the days/s due to unforeseen circumstances e.g. inclement weather conditions, accessibility to geo-sites etc. Instructions on the use of Field Tablets and other geological equipment and software will be provided both prior to and during the 2 days of field work.

**Assessment Due Date**

Week 12 Friday (2 June 2023) 11:59 pm AEST

Submit electronically via Moodle with your name, unit code and assignment number i.e. NAME\_ENAR12016\_Assignment Title

**Return Date to Students**

Assignments will be returned within a fortnight once all have been submitted for assessment

**Weighting**

25%

**Minimum mark or grade**

To pass this course you must obtain a minimum of 40% for this assessment item and must obtain an overall passing grade (50% or greater) for ALL assessment items.

**Assessment Criteria**

This assessment item is to take the form of a Field Report. Marks will be awarded for:

- Adequacy and accuracy of field descriptions
- Neatness and clarity of field sketches, photographs and maps
- Ability to present a coherent and logical geological sequence of events and the ability to place these within the prevailing plate tectonic model.
- General presentation and layout of the report
- Readability and grammar
- Use and adequacy of referencing.

Note: this assessment item will be discussed further during Moodle forums and tutorials both prior to and after the conclusion of the residential school field trips.

### **Referencing Style**

- [Harvard \(author-date\)](#)

### **Submission**

Online

### **Submission Instructions**

Please use the upload link on Moodle for online electronic assignment submission as a MS WORD or PDF document. It is expected that you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as it is indicated. It is important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces the chances of omissions, losses and errors.

### **Learning Outcomes Assessed**

- Apply geological knowledge of rock types, geological time, earth processes and tectonics to create a geological history and simple geological map of a defined geographic area
- Explain how human interaction with earth processes and materials can impact the environment

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem