ENAR12014 Introduction to Mining Technology and Mineral Processing Term 1 - 2019

Profile information current as at 29/04/2024 06:21 pm

All details in this unit profile for ENAR12014 have been officially approved by CQUniversity 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 introduces students to the improved safety and productivity of mining methods from an historical perspective. Students will investigate the social, environmental and economic sustainability of Australian mining operations and the impact of Australian laws on coal and metalliferous, underground and surface mining, blast design, and mineral processing. During the unit students will be expected to demonstrate an effective and professional level of teamwork, communication and support for collaborative peer group learning through the use of forums, reflective journals and workbooks.

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 <u>Assessment Policy and</u> <u>Procedure (Higher Education Coursework)</u>.

Offerings For Term 1 - 2019

Online

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).

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

Written Assessment
 Weighting: 20%
 Written Assessment
 Weighting: 35%
 Written Assessment
 Weighting: 45%
 Portfolio
 Weighting: Pass/Fail

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 <u>University's Grades and Results Policy</u> for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the <u>CQUniversity Policy site</u>.

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 <u>CQUniversity Policy site</u>.

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 Student verbal feedback via Zoom tutorials.

Feedback

Students who engaged with the unit's content via Zoom tutorials and videos felt they got a lot out of the unit and the content was relevant to their workplaces.

Recommendation

To keep offering Zoom tutorials in the evenings to keep engaging with working students.

Unit Learning Outcomes

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

- 1. Analyse the historical development of mining methods to determine the key factors that have improved the safety and productivity of mining operations.
- 2. Assess the social, environmental and economic sustainability of Australian mining operations.
- 3. Outline the acts and regulations associated with Australian law that impact on blast design and mineral processing for surface, underground, coal and metalliferous mining.
- 4. Determine a suitable blast design for a coal or metalliferous deposit in a surface mining operation.
- 5. Evaluate suitable mineral processing methods for the extraction, separation and concentration of various coal and metalliferous products.
- 6. Demonstrate an effective and professional level of teamwork, communication and support for collaborative peer group learning through the use of forums, reflective journals and workbooks.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Written Assessment - 20%	•	٠	•			
2 - Written Assessment - 35%		•	•	•		
3 - Written Assessment - 45%			•	•	•	
4 - Portfolio - 0%	٠	٠	٠	٠	٠	٠

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						

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 20%	•	•	•	•			•	•		
2 - Written Assessment - 35%	•	•	•	•		•				
3 - Written Assessment - 45%	•	•	•	•		•				
4 - Portfolio - 0%	•		•	•	•	•	•	•		

Textbooks and Resources

Textbooks

ENAR12014

Prescribed

Introductory Mining Engineering

Edition: Second (2002) Authors: Hartman, HL & Mutmansky, JM John Wiley and Sons Hoboken , New Jersey , USA ISBN: 0-471-34851-1 Binding: Hardcover

Additional Textbook Information

Copies can be purchased at the CQUni Bookshop here: <u>http://bookshop.cqu.edu.au</u> (search on the Unit code)

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Word processing software (e.g. Microsoft Word)
- Zoom capacity (web cam and microphone)
- Speadsheet Software

Referencing Style

All submissions for this unit must use the referencing style: <u>Harvard (author-date)</u> For further information, see the Assessment Tasks.

Teaching Contacts

Brendan Donnelly Unit Coordinator b.donnelly@cqu.edu.au

Schedule

Week 1 - 11 Mar 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Mining	Hartman & Mutmansky Chapter 1: Introductory Mining Engineering, Reading in Week 1 Moodle Block	Weekly Zoom Tutorial Session - Course Introduction
Week 2 - 18 Mar 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Mine Development	Hartman & Mutmansky Chapter 4: Sections 4.1 to 4.6 Chapter 6: Sections 6.1 Reading in Week 2 Moodle Block	Weekly Zoom Tutorial Session - Mine Development
Week 3 - 25 Mar 2019		

Module/Topic	Chapter	Events and Submissions/Topic
Mining Methods	Hartman & Mutmansky Chapter 07: Sections 7.1 to 7.5 Chapter 08: All Chapter 09: Sections 9.1 to 9.5 Chapter 10: Sections 10.1 to 10.5 Chapter 11: Sections 11.1 to 11.5 Chapter 12: Sections 12.1 to 12.4 Reading in Week 3 Moodle Block	Weekly Zoom Tutorial Session - Mining Methods
Week 4 - 01 Apr 2019		
Module/Topic	Chapter	Events and Submissions/Topic Weekly Zoom Tutorial Session - Mine Surveying
Mine Surveying	Reading in Week 4 Moodle Block	Assignment 1 Due: Week 4 Monday (1 Apr 2019) 8:00 am AEST Learning Portfolio Due: Week 4 Monday (1 Apr 2019) 8:00 am AEST
Week 5 - 08 Apr 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Mine Planning	Hartman & Mutmansky Chapter 06: Sections 6.2 to 6.5 Chapter 07: Sections 7.7 Chapter 09: Sections 9.6 Chapter 10: Sections 10.6 and 10.7 Chapter 11: Sections 11.1 to 11.6 Reading in Week 5 Moodle Block	Weekly Zoom Tutorial Session Session - Mine Planning
Vacation Week - Non Teaching Wee	k - 15 Apr 2019	
Module/Topic	Chapter	Events and Submissions/Topic
Vacation Week	Vacation Week	Vacation Week
Week 6 - 22 Apr 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Blast Design	Reading in Week 6 Moodle Block	Weekly Zoom Tutorial Session - Blast Design
Week 7 - 29 Apr 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Module/Topic Mine Ventilation and Mine	Chapter Hartman & Mutmansky	Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation
Module/Topic Mine Ventilation and Mine Environmental Hazards	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block	Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block	Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019 Module/Topic	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block	Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST Events and Submissions/Topic
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019 Module/Topic Mining and the Environment	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block	 Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST Events and Submissions/Topic Weekly Zoom Tutorial Session - Mining and the Environment
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019 Module/Topic Mining and the Environment Week 9 - 13 May 2019	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block	 Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST Events and Submissions/Topic Weekly Zoom Tutorial Session - Mining and the Environment
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019 Module/Topic Mining and the Environment Week 9 - 13 May 2019 Module/Topic	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block Chapter	Events and Submissions/Topic Weekly Zoom Tutorial Session Session • Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST Events and Submissions/Topic Weekly Zoom Tutorial Session - Mining and the Environment Events and Submissions/Topic
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019 Module/Topic Mining and the Environment Week 9 - 13 May 2019 Module/Topic Health and Safety	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block	 Events and Submissions/Topic Weekly Zoom Tutorial Session Session - Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST Events and Submissions/Topic Weekly Zoom Tutorial Session - Mining and the Environment Events and Submissions/Topic Weekly Zoom Tutorial Session - Health and Safety
Module/Topic Mine Ventilation and Mine Environmental Hazards Week 8 - 06 May 2019 Module/Topic Mining and the Environment Week 9 - 13 May 2019 Module/Topic Health and Safety Week 10 - 20 May 2019	Chapter Hartman & Mutmansky Chapter 12: Section 12.5 Reading in Week 7 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block Chapter Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block Hartman & Mutmansky Chapter 2: Section 2.4 Reading in Week 8 Moodle Block	Events and Submissions/Topic Weekly Zoom Tutorial Session Session Mine Ventilation Assignment 2 Due: Week 7 Monday (29 Apr 2019) 8:00 am AEST Events and Submissions/Topic Weekly Zoom Tutorial Session - Mining and the Environment Events and Submissions/Topic Weekly Zoom Tutorial Session - Mining and the Environment Events and Submissions/Topic Weekly Zoom Tutorial Session - Health and Safety

Introduction to Mineral Processing	Reading in Week 10 Moodle Block	Weekly Zoom Tutorial Session - Introduction to Mineral Processing
Week 11 - 27 May 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Metallurgical Processing	Reading in Week 11 Moodle Block	Weekly Zoom Tutorial Session - Metallurgical Processing
Week 12 - 03 Jun 2019		
Module/Topic	Chapter	Events and Submissions/Topic
Hydrometallurgical Processing	Reading in Week 12 Moodle Block	Weekly Zoom Tutorial Session - Hydrometallurgical Processing
Review/Exam Week - 10 Jun 2019		
Module/Topic	Chapter	Events and Submissions/Topic
No module or topic for review week.	No reading required.	Assignment 3 Due: Review/Exam Week Monday (10 June 2019) 8:00 am AEST
Exam Week - 17 Jun 2019		
Module/Topic	Chapter	Events and Submissions/Topic
No module or topic for exam week.No exam.	No reading required.	No exam.

Term Specific Information

Lecturer: Brendan Donnelly email: b.donnelly@cqu.edu.au Phone: 07 4940 7853

Assessment Tasks

1 Assignment 1

Assessment Type

Written Assessment

Task Description

This assessment is designed to strengthen your understanding of the historical development of mining methods and their social, environmental and economic impacts on Australian society. You will need to carefully review the material provided in Moodle and to answer the questions in the assignment. In order to achieve this you will need to:

- review the detailed assignment questions found in Moodle
- review relevant literature (textbooks, websites, etc) to gain a broad understanding of costs, processes and procedures associated with sampling and testing rocks.
- research the primary literature to locate relevant current primary sources (i.e. scientific journal articles written in the last 3 years)
- complete the assignment questions in your own words, making effective use of the available resources

Your assignment should be produced in an electronic format using word, excel and pdf documents. Submit your assignment through the assessment link on Moodle.

Note: All submissions are processed through the similarity detection software (called Turnitin). You must ensure that all of the work is your own, in line with University requirements.

Assessment Due Date

Week 4 Monday (1 Apr 2019) 8:00 am AEST Submit using the link on the ENAR12014 moodle page.

Return Date to Students

Vacation Week Monday (15 Apr 2019)

Assignments will be returned with feedback within two weeks.

Weighting

20%

Minimum mark or grade

50%

Assessment Criteria

Use clear, coherent sentences.

Where appropriate, include clearly labelled diagrams.

Ensure photographs, pictures and diagrams are correctly labelled, introduced and referred to within the text of the answer.

Ensure formulae and workings are shown in sufficient detail to clearly explain how the answer was derived. Answers should show correct units of measure eq. (m, MN, m², tonnes, m³, °C, etc).

Correctly cite and reference sources of information. Include a list of references at the end of the assignment. Use mining and mineral processing terminology correctly.

Refer to assignment specific assessment criteria listed in Moodle for further details.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Use Turnitin and Moodle to submit assignments.

Learning Outcomes Assessed

- Analyse the historical development of mining methods to determine the key factors that have improved the safety and productivity of mining operations.
- Assess the social, environmental and economic sustainability of Australian mining operations.
- Outline the acts and regulations associated with Australian law that impact on blast design and mineral processing for surface, underground, coal and metalliferous mining.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Cross Cultural Competence
- Ethical practice

2 Assignment 2

Assessment Type

Written Assessment

Task Description

This assessment is designed to strengthen your understanding of the technical aspects of mining associated with drilling and fragmentation, mining acts and regulations and ventilation. You will need to carefully review the material provided in moodle and to answer the questions in the assignment.

In order to achieve this you will need to:

- review the detailed assignment questions found in Moodle
- review relevant literature (textbooks, websites, etc) to gain a broad understanding of costs, processes and procedures associated with sampling and testing rocks.
- research the primary literature to locate relevant current primary sources (scientific journal articles written in the last 3 years)
- complete the assignment questions in your own words that makes effective use of the sources of information

Your assignment should be produced in an electronic format using word, excel and pdf documents. Submit your assignment through the assessment link on Moodle.

Note: All submissions are processed through the similarity detection software (called Turnitin), hence the requirement to submit the documents as pdf files. You must ensure that all of the work is your own, in line with University requirements.

Assessment Due Date

Week 7 Monday (29 Apr 2019) 8:00 am AEST Submit using the link on the ENAR12014 moodle page.

Return Date to Students

Week 9 Monday (13 May 2019) Assignments will be returned with feedback within two weeks.

Weighting

35%

Minimum mark or grade 50%

Assessment Criteria

Use clear, coherent sentences.

Where appropriate, include clearly labelled diagrams.

Ensure photographs, pictures and diagrams are correctly labelled, introduced and referred to within the text of the answer.

Ensure formulae and workings are shown in sufficient detail to clearly explain how the answer was derived.

Answers should show correct units of measure eg. (m, MN, m^2 , tonnes, m^3 , °C, etc).

Correctly cite and reference sources of information. Include a list of references at the end of the assignment. Use mining and mineral processing terminology correctly.

Refer to assignment specific assessment criteria listed in Moodle for further details.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Use Turnitin and Moodle to submit assignments.

Learning Outcomes Assessed

- Assess the social, environmental and economic sustainability of Australian mining operations.
- Outline the acts and regulations associated with Australian law that impact on blast design and mineral processing for surface, underground, coal and metalliferous mining.
- Determine a suitable blast design for a coal or metalliferous deposit in a surface mining operation.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

3 Assignment 3

Assessment Type

Written Assessment

Task Description

This assessment is designed to strengthen your understanding of the technical aspects of mining and mineral processing. You will need to carefully review the material provided in Moodle and to answer the questions in the assignment.

In order to achieve this you will need to:

- review the detailed assignment questions found in Moodle
- review relevant literature (textbooks, websites, etc) to gain a broad understanding of costs, processes and procedures associated with sampling and testing rocks.
- research the primary literature to locate relevant current primary sources (scientific journal articles written in the last 3 years)
- complete the assignment questions in your own words that makes effective use of the sources of information

Your assignment should be produced in an electronic format using word, excel and pdf documents. Submit your assignment through the assessment link on Moodle.

Note: All submissions are processed through the similarity detection software (called Turnitin), hence the requirement to

submit the documents as pdf files. You must ensure that all of the work is your own, in line with University requirements.

Assessment Due Date

Review/Exam Week Monday (10 June 2019) 8:00 am AEST Submit using the link on the ENAR12014 moodle page.

Return Date to Students

Exam Week Friday (21 June 2019) Assignments will be returned within two weeks.

Weighting

45%

Minimum mark or grade 50%

Assessment Criteria

Use clear, coherent sentences.

Where appropriate, include clearly labelled diagrams.

Ensure photographs, pictures and diagrams are correctly labelled, introduced and referred to, within the text of the answer.

Ensure formulae and workings are shown in sufficient detail to clearly explain how the answer was derived.

Answers should show correct units of measure eg. (m, MN, m², tonnes, m³, °C, etc).

Correctly cite and reference sources of information. Include a list of references at the end of the assignment. Use mining and mineral processing terminology correctly.

Refer to assignment specific assessment criteria listed in Moodle for further details.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Use Turnitin and Moodle to submit assignments.

Learning Outcomes Assessed

- Outline the acts and regulations associated with Australian law that impact on blast design and mineral processing for surface, underground, coal and metalliferous mining.
- Determine a suitable blast design for a coal or metalliferous deposit in a surface mining operation.
- Evaluate suitable mineral processing methods for the extraction, separation and concentration of various coal and metalliferous products.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence

4 Learning Portfolio

Assessment Type

Portfolio

Task Description

The "Learning Portfolio" provides you with an opportunity to reflect on what you are learning. You will record in the Learning Portfolio, notes on any work and reading that is relevant to the learning outcomes detailed in the course profile. You will record and demonstrate evidence of all of the learning outcomes detailed for this course, particularly teamwork, cultural sensitivity and ethical values. The Learning Portfolio provides you with an opportunity to discuss your learning experiences online. It is also a record of websites, texts and journal articles that may be useful for future reference in your career in mining.

With each assignment submitted you will also submit an updated version of your Learning Portfolio. There are three elements to the portfolio,

- 1. Study Diary
- 2. Learning Reflections
- 3. Interactions

Each element should contain updates when submitted with an assignment.

Maintain a "Learning Journal" while you are working on this course. Spend the last 5 minutes of any study session updating your Learning Journal.

Reflect on your learning and record what you have been working on. Record your work and background reading that is completed as part of the preparation for submitting an assignment.

Record your online discussions and interactions and map them to the learning outcomes for this course.

Record and demonstrate evidence of all of the learning outcomes detailed for this course, particularly teamwork, cultural sensitivity and ethical values.

Assessment Due Date

Week 4 Monday (1 Apr 2019) 8:00 am AEST A copy of your updated learning portfolio should be submitted with each assignment submission.

Return Date to Students

Vacation Week Monday (15 Apr 2019)

Your Learning Portfolio will be returned with comments along with your marked assignments.

Weighting

Pass/Fail

Minimum mark or grade

Pass

Assessment Criteria

With each assignment submitted you will also submit an updated version of your Learning Portfolio. There are three elements to the Learning Portfolio,

- 1. Study Diary
- 2. Learning Reflections
- 3. Interactions

Each element should contain updates when submitted with an assignment.

Maintain a Learning Journal while you are working on this course. Spend the last 5 minutes of any study session updating your Learning Journal.

Reflect on your learning and record what you have been working on. Record your work and background reading that is completed as part of the preparation for submitting an assignment.

Record your online discussions and interactions and map them to the learning outcomes for this course.

Record and demonstrate evidence of all of the learning outcomes detailed for this course, particularly teamwork, cultural sensitivity and ethical values.

Do not spend time on presentation. The important thing is to provide evidence that you have updated your portfolio weekly.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

A copy of your updated learning portfolio should be submitted with each assignment submission.

Learning Outcomes Assessed

- Analyse the historical development of mining methods to determine the key factors that have improved the safety and productivity of mining operations.
- Assess the social, environmental and economic sustainability of Australian mining operations.
- Outline the acts and regulations associated with Australian law that impact on blast design and mineral processing for surface, underground, coal and metalliferous mining.
- Determine a suitable blast design for a coal or metalliferous deposit in a surface mining operation.
- Evaluate suitable mineral processing methods for the extraction, separation and concentration of various coal and metalliferous products.
- Demonstrate an effective and professional level of teamwork, communication and support for collaborative peer group learning through the use of forums, reflective journals and workbooks.

Graduate Attributes

- Communication
- Critical Thinking
- Information Literacy

- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

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 <u>Academic Learning Centre (ALC)</u> 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