



Faculty of Engineering

School of Minerals and Energy Resources Engineering

Postgraduate Course Outline

MINE8101 – 6UOC

Fundamentals of Mining Engineering

Associate Professor David Laurence

T3 2020

CONTENTS

1. INFORMATION ABOUT THE COURSE.....	3
2. AIMS, LEARNING OUTCOMES AND GRADUATE ATTRIBUTES	4
3. REFERENCE RESOURCES	4
4. COURSE CONTENT AND LEARNING ACTIVITIES.....	5
5. COURSE ASSESSMENT	6
6. ASSESSMENT CRITERIA.....	7
7. STUDYING A PG COURSE IN UNSW MINERALS AND ENERGY RESOURCES ENGINEERING	8

4. COURSE CONTENT AND LEARNING ACTIVITIES

4.1. Learning Activities Summary

Week	Week Starting	Hrs	Topic	Content/Activities
1	13 Sep		Mining engineering as a profession	1.1 Course Introduction - DL
				1.2 An introduction to mine management – DL
				1.3 Managing mines – how is it different? - DL
				1.4 A Day in the life of a mining engineer
2	20 Sep		Fundamentals of geology	2.1 Introduction to Rocks and minerals
				2.2 Fundamentals of Ore genesis and mineral exploration
				2.3 Mine geomechanics – an introduction
3	27 Sep		Fundamentals of Coal Mining	3.1 Open cut coal mining methods
				3.2 Underground coal mining methods
				3.3 Mine ventilation
4	4 Oct		Fundamentals of Hard Rock Mining	4.1 Large scale open pit mining (hard rock)
				4.2 Underground hard rock mining methods

5. COURSE ASSESSMENT

5.1. Assessment Summary

All assessments are due 23:59 hrs Sydney time on Sunday of the week, unless otherwise indicated in the table below.

Assessment task	Due date	Release date	Weight (%)	Assessment	Learning outcomes assessed
1	4 Oct	14 Sep	15	Individual report (max. 500 words) An interview with a mining engineer	1
2	27 Sep	14 Sep	15	Online quiz	1, 2
3	11 Oct	28 Sep	15	Online quiz	1, 2
4	25 Oct	12 Oct	15	Online quiz	1, 2
5	1 Nov	28 Sep	40	Individual report (max. 3000 words) Major assignment	1, 3, 4, 5

6. ASSESSMENT CRITERIA

The assessment criteria provide a framework for students when preparing major assignments in the course as well as a guideline for assessors when marking an assignment. The student is advised to review the relevant framework before undertaking their assignment.

The criteria listed for each item of assessment and the descriptions contained therein are not intended to be prescriptive nor is it an exhaustive list. Rather it should be viewed as a framework to guide the student as to the type of information and depth of c

e

e

If you have concerns about your web access for a course presented in distance mode, we would encourage you to contact the course convenor before the course commences, to discuss whether it will be possible for you to complete a distance course.

7.4.

perspective is valuable.

Feedback is given via <https://student.unsw.edu.au/myexperience> and you will be notified when this is available for you to complete.

We



School of Minerals and Energy Resources Engineer Assessment Cover Sheet

Course Convenor: _____
 Course Code: _____ Course Title: _____
 Assignment: _____
 Due Date: _____
 Student Name: _____ Student ID: _____

ACADEMIC REQUIREMENTS

Before submitting this assignment, the student is advised to review:

- x the assessment requirements contained in the briefing document for the assignment;
- x the various matters related to assessment in the relevant Course Outline; and
- x the **Plagiarism and Academic Integrity** website at < <http://www.lc.unsw.edu.au/plagiarism/pintro.html> > to ensure they are familiar with the requirements to provide appropriate acknowledgement of source materials.

If after reviewing this material there is any doubt about assessment requirements, then in the first instance the student should consult with the Course Convenor and then if necessary with the Director – Undergraduate Studies.

While students are generally encouraged to work with other students to enhance learning, all assignments submitted for assessment must be their entire own work and duly acknowledge the use of other person's work or material. The student may be required to explain any or all parts of the assignment to the Course Convenor or other authorised persons. **Plagiarism** is using the work of others in whole or part without appropriate acknowledgement within the assignment in the required form. **Collusion** is where another person(s) assists in the preparation of a student's assignment without the consent or knowledge of the Course Convenor.

Plagiarism and Collusion are considered as Academic Misconduct and will be dealt with according to University Policy.

STUDENT DECLARATION OF ACADEMIC INTEGRITY

I declare that:

- x This assessment item is entirely my own original work, except where I have acknowledged use of source material [such as books, journal articles, other published material, the Internet, and the work of other student/s or any other person/s].
- x This assessment item has not been submitted for assessment for academic credit in this, or any other course, at UNSW or elsewhere.

I understand that:

- x The assessor of this assessment item may, for the purpose of assessing this item, reproduce this assessment item and provide a copy to another member of the University.
- x The assessor may communicate a copy of this assessment item to a plagiarism checking service (which may then retain a copy of the assessment item on its database for the purpose of future plagiarism checking).

Student Signature: _____

Date: _____

Students are advised to retain a copy of this assessment for their records and submission should be made in accordance to the assessment details available on the course Moodle site.

MINE8101: Fundamentals of Mining Engineering 2020