



Faculty of Engineering

School of Minerals and Energy Resources Engineering

MINE5040

Coal Mining Methods, Mine Planning and Applied
Geomechanics

T2 2020

Ismet Canbulat

1 INFORMATION ABOUT THE COURSE

Course Code:	MINE5040	Term:	T2, 2020	Level:	PG	Units/Credits	6 UOC
Course Name:							

Course Convenor:			
Contact Details	School of Minerals and Energy Resources Engineering Old Main Building - Rm 159G	EMAIL:	i.canbulat@unsw.edu.au
		Phone:	+61 2 9385 0721
Contact times			

Welcome to MINE5040 Geotechnical Assessment for Underground and Open Cut Mining. In this course, range of mining methods used in underground coal mining and the core geotechnical parameters and

- MEA Report Writing Guide for Mining Engineers. P Hagan and P Mort (Mining Education Australia (MEA)). (Latest edition available for download from the School website or a hardcopy version is available from the UNSW Bookshop)
- Ground Engineering - Principles and Practices for Underground Coal Mining JM Galvin, Springer 2016.
- Rock Mechanics for Underground Mining GHG Brady & ET Brown, 3rd edition, Kluwer Academic Press, 2004.
- Rock Mechanics and the Design of Structures in Rock. L Obert & WI Duvall, John Wiley & Sons 1967.
- Fundamentals of Rock Mechanics, JC Jaeger & NGW Cook, Chapman & Hall 1979.
- Rock Fracture Mechanics. BN Whittaker, RN Singh & G Sun, Elsevier 1992.
- Coal Mine Ground Control. SS Peng, John Wiley & Sons 1986.
- Longwall mining. SS Peng and HS Chiang. John Wiley and Sons Ltd. ISBN 10: 0978938305 ISBN 13: 9780978938307.
- Rockbursts in Coal Mines and their Prevention. G Brauner, AA Balkema 1994.
- Australian Coal Mining Practice – Monograph 12. AJ Hargraves, CH Martin (eds.), AusIMM 1975.
- Subsidence Engineers' Handbook. National Coal Board 1975.


- *Guide to Authors*, 2008. (Australasian Institute of Mining and Metallurgy; Melbourne).
- *Style Manual for authors, editors and printers*. 6th edition, (John Wiley & Sons).

There are many publications available online. Students are encouraged to review available publications.



The range of assessment tasks have been designed to ensure a student can demonstrate they have satisfactorily attained the minimum requirements of the course as defined in the *Learning Outcomes* of the course and *Graduate Attributes* of the program. The student is also advised to review the relevant *Assessment Criteria* before completing each of the assessment items.

A01	- dynamic failures and longwall periodic weighting – see assignments sheets	29 Aug 2020		



The following assessment criteria provide a framework for students when preparing 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 coverage that is expected to be evident in a submission for assessment; the framework illustrates for example what would distinguish an excellent achievement from a poor achievement.

The student should be cognisant that a range of factors is often being assessed in any one assignment; not just whether the final results are numerically correct. Consideration is given to other relevant elements that contribute to the *Learning Outcomes* of the course as well as the *Graduate Attributes* of the overall degree program.

The student is cautioned against merely using the assessment criteria as a checklist. When assessing an assignment, elements in the framework will be examined in terms of quality and creativity. Hence ensuring all the listed elements are merely covered in an assignment is often not sufficient in itself and will not automatically lead to full marks being awarded. Other factors such as how the student went about presenting information, how an argument was structured and/or the elements supporting a particular recommendation or outcome are also important.

Finally the framework can also be used to provide feedback to a student on their performance in an assignment.

The assessment criteria that will be used in assessing the assignment reports is summarised in the following table.

--	--	--	--	--	--	--

failing the course. You would also have a NC (course not completed) mark on your transcript and would need to re-enroll in the course.

Equitable Learning Services aims to provide all students with a free and confidential service that

