COURSE OUTLINE FOR
PART B OF

MINE2810
INTRODUCTION TO
METALLURGICAL PROCESSING

AND

MINE3800
INTRODUCTION TO
METALLURGICAL PROCESSING

SESSION 2, 2014

(DRAFT)
GENERAL COURSE INFORMATION

**Course Title:** Introduction to Metallurgical Processing

**Semesters Offered:** Semester 2

**Level:** Undergraduate

**Number of Units/Credits:** 3 (UNSW)

**Contact Hours per Week**

Equivalent of 4 contact hours per week over 6 weeks, to be utilised for lectures, practicals and tutorials. These will all be scheduled in weeks 7 and 12, on Mondays, and Tuesdays in the semester 2. Start and finish dates are September 16 and November 1.

Contact times during those weeks are scheduled for
- Mondays 11 am – 13 pm
- Friday 12– 14 pm
- Practical sessions and timetable of lab activities to be announced.

Please confirm venues on your timetable.

For up to date information on lectures and workshops, see the Course Calendar in TELT Moodle.

**Assessment**

Assessments will include two laboratory sessions (10% each), an oral presentation (15%) and a final exam (45%), 15% mark for completion of assignments and attendance to the Annual Kenneth Finlay Lecture, plus 5% for regular attendance and class participation. Information and resources will be provided via the course website. Assignments are individual assessment items. Practicals and oral presentation will be done in groups allocated by the course lecturer. Attendance is compulsory for the entire oral presentation session. The final exam will be an individual exam worth 45%.

**NOTE:** Course completion requires that all assessment items be completed.

**Course Convenor**

Seher Ata. Room 159C, Old Main Building. Phone: x57659. Email: s.ata@unsw.edu.au

**Course Description**

This is an introductory course in metallurgical processing, designed for students with no prior training in this area. Students are not expected to become expert practitioners in the field, but to learn enough about the concepts and processes to work effectively with metallurgists and to manage projects that include metallurgical operations.
The course begins with an overview of the discipline of metallurgy, and describes the various drivers for metallurgists working in operating plants or in project design. Topics covered include comminution, physical separation, coal preparation, flotation, leaching, CIP and solvent extraction. Some basic analytical tools and a wide range of metallurgical terms and concepts are covered. There will be material on the interfaces between the mining department and the mill and smelter.

Key sustainability issues are also examined briefly, including the drive to reduce energy use in crushing and grinding, reduce water usage across all areas of processing, and minimise environmental damage.

**Assumed Background**

This is an introductory course, though there is an assumption that students have a basic knowledge of mining terminology, and mining project development and operation.

**Course Content**

This course involves the following topics:
Lecture 1 a) + 1 b) – Introduction and Terminology

1a) Introduction, Assessment, History, Field of metallurgy
   Grade and recovery,
   Mineral composition, Circuits
1b) interfaces between Mining & Milling, at the crusher,
   grade control, marginal ore stockpiles, mine-to-mill

Lecture 2 - Liberation & Comminutation

Sources of data, Metallurgical domains, testwork
Mineral liberation, grade-recovery relationship
Comminution introduction,
Crushing and grinding equipment,
Classification, circuits, screens and cyclones
Energy and size reduction,

Lecture 3 – Classification and Physical Separation, Dewatering

Representing sizing data
more on screens
Bond Milling Work Index
   Closing the circuit – more on cyclones
Particle separation
Gravity separation, ease of separation, types of separator
   Mineral sands, beach sands, processes
   Magnetic separation, types of separators
   Electrostatic separation, machines
Dewatering; methods, fundamentals, equipment, flocculation

Lecture 4 – Flotation

Flotation
   definition, history, limits, phases, mechanisms
   hydrophobicity, reagents, entrainment
   cell types, circuits, testwork, flowsheets

Lecture 5 – Coal Preparation

Coal rank and analysis
   Coal preparation; trends, flowsheet, processes, equipment
   Testwork; sink-float test

Lectures 6– Chemical Processes

Hydrometallurgy
   leaching, copper minerals, gold
      heap leach, testwork, bacterial leaching
Solvent Extraction – Electrowinning
   Mixer-settlers, electrowinning cells, flowsheets
Carbon-in-pulp & carbon-in-leach for gold
   steps, leaching rates, adsorption on carbon,
   desorption and electrowinning

Lecture 7 – Sustainability issues

Sustainability issues, energy, High Pressure Grinding Rolls
Mine-to-Mill, costs; water, cyanide & the environment

<table>
<thead>
<tr>
<th>Tutorials</th>
<th>2 screen analyses + Bond Work Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 mass balances</td>
</tr>
<tr>
<td></td>
<td>4 flotation kinetics</td>
</tr>
</tbody>
</table>

| Practicals | 1 Grinding & screening             |
|           | 2 Flotation                        |

AIMS, LEARNING OUTCOMES & GRADUATE ATTRIBUTES
Course Aims

This course aims to provide the student with sufficient knowledge of mineral processing technology to operate effectively as a member of a multi-disciplinary team in a mineral design project or operating mine.

Learning Outcomes

It is intended that students will be able to:

- Describe the work that metallurgists do, and define the different areas of metallurgical processing and their specialist technologies
- Describe the major drivers for metallurgical processing
- Explain the implications of mineralogical characteristics for metallurgical processing requirements
- Define and display understanding of common metallurgical terms
- Interpret metallurgical technical reports
- Conduct basic mineral processing investigations using partition curves, PSD plots, power/product size relationships
- Describe commonly used metallurgical processes in the following industries:
  - Coal processing
  - Base metals extraction
  - Titanium minerals extraction
  - Precious metals extraction

Graduate Attributes

This course will contribute to the development of the following Graduate Attributes:

- appropriate technical knowledge
- having advanced problem solving, analysis and synthesis skills with the ability to tolerate ambiguity
- ability for engineering design and creativity
- awareness of opportunities to add value through engineering and the need for continuous improvement
- being able to work and communicate effectively across discipline boundaries
- having HSEC consciousness
- being active life-long learners.

RECOMMENDED TEXTS AND RESOURCES
Reference Texts


7. Publications from Suppliers and Original Equipment Manufacturers

Online and Other Resources

TELT Moodle for the course profile, learning guide, reading pack and presentations

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Module</th>
<th>Activity</th>
<th>Content</th>
<th>Assessment</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Lectures and activity based learning</th>
<th>Activity</th>
<th>Other Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>(8-Sep)</td>
<td>Introduction &amp; Liberation &amp; Comminution</td>
<td>Overview of course</td>
<td></td>
<td>Introduction, Grade and recovery, Circuits Metallurgical domains, Mineral liberation Comminution introduction, Representing sizing data, Equipment Energy and size reduction, Ore characterisation</td>
</tr>
<tr>
<td>8</td>
<td>(15-Sep)</td>
<td>Classification &amp; Physical Separation</td>
<td>Assignment 1</td>
<td></td>
<td>Physical separation Physical separation equipment Equipment performance curves</td>
</tr>
<tr>
<td>9</td>
<td>(22-Sep)</td>
<td>Flotation &amp; Coal Processing</td>
<td>Lectures and activity based learning, Lectures, Laboratory practical session, Assignment</td>
<td>Froth flotation intro, Flotation equipment, Flotation circuits, Reagents, Coal processing intro, Coal circuits, Dense medium separation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(29-Sep)</td>
<td>Non-Teaching Week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>(6-Oct)</td>
<td>Chemical Processing &amp; Dewatering</td>
<td>Lectures and activity based learning, Laboratory practical session</td>
<td></td>
<td>Hydrometallurgy, Leaching in heaps and Tanks, SXEW circuits, CIP circuits, Dewatering, Tailings disposal</td>
</tr>
<tr>
<td>11</td>
<td>(13-Oct)</td>
<td>Sustainability</td>
<td>Lectures and activity based learning</td>
<td></td>
<td>Mine-to-Mill Recycling</td>
</tr>
<tr>
<td>12</td>
<td>(20-Oct)</td>
<td></td>
<td></td>
<td></td>
<td>No Teaching</td>
</tr>
<tr>
<td>13</td>
<td>(27-Oct)</td>
<td>Oral presentations</td>
<td>Group presentations covering relevant topics</td>
<td></td>
<td>Each group will present a mineral processing flowsheet for a particular commodity, GROUP Oral presentation</td>
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</tbody>
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**LEARNING ACTIVITIES AND METHODS**
Learning Activities Summary

Assessment of Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Assessment Methods</th>
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</thead>
<tbody>
<tr>
<td>Describe the work that metallurgists do, and define the different areas of metallurgical processing and their specialist technologies</td>
<td>-Presentation</td>
</tr>
<tr>
<td></td>
<td>-Exam</td>
</tr>
<tr>
<td>Interpret metallurgical technical reports</td>
<td>-Assignments</td>
</tr>
<tr>
<td></td>
<td>-Exam</td>
</tr>
<tr>
<td>Describe the major drivers for metallurgical processing</td>
<td>-Presentation</td>
</tr>
<tr>
<td></td>
<td>-Exam</td>
</tr>
<tr>
<td>Explain the implications of mineralogical characteristics for metallurgical processing requirements</td>
<td>-Assignments</td>
</tr>
<tr>
<td></td>
<td>-Orals</td>
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<tr>
<td></td>
<td>-Practicals</td>
</tr>
<tr>
<td></td>
<td>-Exam</td>
</tr>
<tr>
<td>Define and use common metallurgical terms</td>
<td>-Orals</td>
</tr>
<tr>
<td></td>
<td>-Practicals</td>
</tr>
<tr>
<td></td>
<td>-Exam</td>
</tr>
<tr>
<td>Describe commonly used metallurgical processes in the following industries:</td>
<td></td>
</tr>
<tr>
<td>o Coal processing</td>
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<tr>
<td>o Base metals extraction</td>
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<td>o Titanium minerals extraction</td>
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<tr>
<td>o Precious metals extraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Presentation</td>
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<tr>
<td></td>
<td>-Practicals</td>
</tr>
<tr>
<td></td>
<td>-Exam</td>
</tr>
</tbody>
</table>

Teaching & Learning Methods

1. Activity-based learning and Assignments: This course utilises activity-based learning methods. Each module combines presentation of new content with learning activities designed to engage students with the new material in a realistic context. The activities are provided in the course handouts and will be also available via the course website. Activities include one formal assignment and attendance to the Annual Kenneth Finley Lecture.

2. Lectures: Learning will be supported with lectures designed to provide a framework for knowledge construction. Each new topic introduced is backed by relevant learning activities. Lectures are not the primary means of delivering content, as a wide range of resources will be provided to students to use throughout the semester.

3. Laboratory Practical sessions 1 and 2: These practicals are an extension of the learning activity format. Students will have an opportunity to use laboratory equipment and demonstrate their mastery of the tools and techniques they have learned in the course, and communicate their results effectively.

4. Oral Presentation: Part of the assessment in this course will be determined by a group presentation about a mineral processing flowsheet for a given commodity. Each group will present on a different commodity. All students are required to be present for the entire presentation session, as assessment will be a combination of lecturer and peer assessment.

ASSESSMENT

Assessment Summary
<table>
<thead>
<tr>
<th>Assessment</th>
<th>Due</th>
<th>Weighting</th>
<th>Process of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical 1</td>
<td>Approx 2 weeks after lab</td>
<td>10%</td>
<td>A write-up of laboratory based activities addressing key issues and including some data analysis.</td>
</tr>
<tr>
<td>Practical 2</td>
<td>Approx 2 weeks after lab</td>
<td>10%</td>
<td>A write-up of laboratory based activities key issues and including some data analysis.</td>
</tr>
<tr>
<td>Group Oral Presentation</td>
<td>Week of October 28</td>
<td>15%</td>
<td>Group presentations where each group presents to the class about typical mineral processes for a given mineral commodity or metal.</td>
</tr>
<tr>
<td>Assignment</td>
<td>15%</td>
<td></td>
<td>These activity is designed to prepare students for the final exam</td>
</tr>
<tr>
<td>Exam</td>
<td>45%</td>
<td></td>
<td>Exam assessing all aspects of metallurgical processing covered during the course</td>
</tr>
<tr>
<td>Regular class participation</td>
<td>5%</td>
<td></td>
<td>Class attendance record</td>
</tr>
</tbody>
</table>

**Late Submissions**

Late submissions will in most cases receive a zero mark. A late submission will only be allowed when a deferred deadline has been approved by the course coordinator prior to due date because of medical or extenuating circumstances. This will require documented evidence, e.g. Medical Certificate, etc. See [http://www.mining.unsw.edu.au/information-about/our-school/policies-procedures-guidelines/assignment-submission-policy/assesment-l](http://www.mining.unsw.edu.au/information-about/our-school/policies-procedures-guidelines/assignment-submission-policy/assesment-l) for further information.

**Assessment Criteria**

Practical reports will be assessed based on the following criteria


<table>
<thead>
<tr>
<th>Criteria</th>
<th>Excellent</th>
<th>Good</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Poor</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results presentation</td>
<td>Excellent logical structure, physical layout and attention to detail</td>
<td>Good logical structure and physical layout</td>
<td>Acceptable structure and physical layout</td>
<td>Unacceptable structure and physical layout</td>
<td>Very little structure and physical layout</td>
<td>Document has no layout and structure</td>
</tr>
<tr>
<td>Results presentation</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td></td>
</tr>
<tr>
<td>Conclusions and demonstration of understanding</td>
<td>The work conducted demonstrates your comprehension and shows insight into the significance of the results</td>
<td>The work conducted demonstrates your comprehension and shows some insight into the significance of the results</td>
<td>The work conducted demonstrates some comprehension</td>
<td>The work conducted demonstrates limited comprehension</td>
<td>No conclusion</td>
<td></td>
</tr>
<tr>
<td>Interpretation of information</td>
<td>Demonstrated a clear appreciation of the problem and the task. Data is properly interpreted and assumptions are made where required and appropriately substantiated.</td>
<td>Demonstrated an adequate appreciation of the problem and the task. Data is adequately interpreted and assumptions are made where required and justified to some extent.</td>
<td>Did not fully appreciate aspects of the problem and the task. There are minor problems with the interpretation of the data and assumptions are not clearly stated or fully justified</td>
<td>Did not appreciate some aspects of the problem and the task. Some data is misinterpreted and assumptions are not adequately justified or substantiated</td>
<td>Did not appreciate important aspects of the problem and the task. Data is misinterpreted and assumptions are not justified or substantiated</td>
<td>Ignored the information provided.</td>
</tr>
<tr>
<td>Calculations and analysis</td>
<td>Calculations and analyses are undertaken in an accurate, systematic and auditable manner with raw data, assumptions, process and results clearly shown.</td>
<td>Calculations and analyses are undertaken systematically with only minor errors or inconsistencies. The raw data, assumptions, process and results shown.</td>
<td>Some inconsistencies are evident in the calculations and analyses, the raw data or assumptions. The results contain minor errors or are not clearly presented.</td>
<td>Calculations and analyses lack rigour and are not based on clearly defined raw data or assumptions. The results contain some errors or are not presented clearly</td>
<td>Calculations and analyses appear ad hoc based on confusing raw data or assumptions. The results contain significant errors or are presented in a confusing manner</td>
<td>No meaningful analyses were performed</td>
</tr>
<tr>
<td>Calculations and analysis</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td>10 9 8 7 6 5 4 3 2 1 0</td>
<td></td>
</tr>
</tbody>
</table>
Assignment Submissions

All assignments submitted for assessment in this course must be made in accordance with the School Policy on Assignment Submissions, hereafter in this subsection termed the Policy. Details of the Policy can be found in the School Policies section of the School webpage at http://www.engineering.unsw.edu.au/mining-engineering/assignment-submission-policy.

Students are required to read the latest version of the Policy and be aware of the various requirements including submission requirements and academic integrity. Failure to adhere to the requirement and/or submit an assignment that is fully compliant with the Policy may result in forfeiture by the student of all marks for that assignment.

An Assignment Coversheet must be attached to each assignment submitted for assessment whether the assignment is submitted in electronic or hardcopy form. The coversheet identifies the student, assignment, course and contains a declaration of academic integrity – see later section on Academic Honesty and Plagiarism. Assignments not containing a fully completed copy of the official coversheet for the assignment will be deemed non-compliant and not marked resulting in the student will be awarded zero marks for the assignment.

By default all assignments for courses in the School must be submitted as an electronic document. The submission requirements for electronic submissions are detailed in the Policy.

In the case where a hardcopy submission of an assignment has been permitted in the assignment briefing document then the submission requirements for hardcopy submissions as detailed in the Policy must be followed. The student must attach to the front of the assignment a completed and signed copy of the Assignment Coversheet.

Students are advised to retain a copy of every assignment submitted for assessment for their own record either in hardcopy or electronic form. From time to time assignments may be mislaid and a student can be asked to re-submit.

Group Work – Peer Assessment

Group work is a key Graduate Attribute in the Mining Engineering program. As such it is integrated into the assessment activities of many courses to determine whether a student has satisfactorily attained one or more of the Learning Outcomes.

An important indicator of a student’s performance and of their contribution to the group’s overall performance is reflected in the results of a formalised system of peer review. The Course Convenor uses these results and other factors in their determination of an individual student’s result for the assignment.


Students should be aware that participation in the peer review process is compulsory and that failure to do so can result in withholding of marks and/or zero marks being allotted to the student for that assignment.

Late Submission of an Assignment

In the normal course of events late submission of an assignment will automatically result in a zero mark being awarded to the student/project team for the assignment.

The onus is on the student to ensure each course assignment is submitted on-time during normal business hours and no later than the required time on the due date as stated in the relevant assignment briefing document.
For further details see Late Submissions in the School Policies section on the School webpage at http://www.engineering.unsw.edu.au/mining-engineering/late-submissions. See also the later section on Adverse Performance – Special Consideration.

Course Results
For details on assessment policy, assessment process and an explanation of course results, see the Assessment Policy section in the School Policies section on the School webpage at www.mining.unsw.edu.au/information-about/our-school/policies-procedures-guidelines.

In some instances a student’s final course result may be withheld and not released on the usual date. This is indicated by a course grade result of either:

- **WD** – which usually indicates that the student has not completed one or more items of assessment or there is an issue with one or more assignment; or
- **WC** – which indicates the student has applied for Special Consideration due to illness or misadventure and the course results have not been finalised.

In either event the onus in on the student to contact the Course Convenor as soon as practicable but **no later than five (5) days** after release of the course result. Failure to take this action will normally result in forfeiture of any additional assessment granted to the student. In which case the student may be required to re-submit an assignment or re-sit the final exam. Failure to contact the Course Convenor within the stated period may result in the student failing the course.

If contact has not been made and/or course assessment has not been finalised by commencement of the following academic semester then the grade will be automatically altered to a course grade of **NC** (course not completed) in Week 2. This will require the student to re-enrol in the course at some later time.

For details on assessment policy, assessment process and an explanation of course results, see the Assessment Policy at https://my.unsw.edu.au/student/academiclife/assessment/AssessmentatUNSW.html.
Adverse Performance – Special Consideration

In cases of illness or other extenuating circumstances that may have adversely impacted on a student's performance in a course, it is recommended the student apply to Student Central for Special Consideration.

It is incumbent on the student to contact the Course Convenor immediately following lodgement and acceptance of the Special Consideration preferably in person and no later than one week from lodgement. Failure to make contact can result in forfeiture for any consideration and subsequent finalisation of the mark for the assignment and/or course.

Only following acceptance and official notification from the University, will any decision be made by the Course Convenor as to an appropriate response based the circumstances outlined by the student.

For further information, see Special Consideration policy at [https://my.unsw.edu.au/student/atoz/SpecialConsideration.html](https://my.unsw.edu.au/student/atoz/SpecialConsideration.html).

Academic Honesty and Plagiarism

The University has certain expectations in terms of academic behaviour related to study and research. This is expressed in the University Policy on Academic Misconduct. Students should be aware of and understand this Policy. For further information, see Plagiarism and Academic Integrity policy at [https://student.unsw.edu.au/plagiarism](https://student.unsw.edu.au/plagiarism).

Plagiarism is one form of Academic Misconduct. It is the presentation of the thoughts or work of another as one’s own. Examples include:

- direct duplication of the thoughts or work of another, including by copying work, or knowingly permitting it to be copied. This includes copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person’s assignment without appropriate acknowledgement;
- paraphrasing another person’s work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and,
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.

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1 Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle.

2 Adapted with kind permission from the University of Melbourne.
Submitting an assessment item that has already been submitted for academic credit elsewhere may also be considered plagiarism.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Undergraduate and Postgraduate Handbooks, and are encouraged to seek advice from academic staff whenever necessary to ensure they avoid plagiarism in all its forms.

The Learning Centre at the University provides academic support services to students. Details about The Learning Centre is available at www.lc.unsw.edu.au.

It provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:
- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

In line with this university expectation, a student must attach to each assignment a fully completed official coversheet which contains a declaration of academic integrity. The following is an extract from an assignment coversheet.

**Extract from an Assignment Coversheet**

**ACADEMIC REQUIREMENTS**

Before submitting this assignment, students are advised to review:

- the assessment requirements contained in the briefing document for the assignment;
- the various matters related to assessment in the relevant Course Outline; and
- 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 by a student must be their entire own work and they may be required to explain any or all parts of the assignment to the Course Convenor or other authorised persons. **Collusion** is where another person(s) assists in the preparation of an 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:

- 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].

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:

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.

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).

Continual Course Improvement

Periodically the process of course evaluation is undertaken. One aspect of this evaluation is feedback from students gathered by various means including:

- UNSW's Course and Teaching Evaluation and Improvement (CATEI) which is an anonymous, on-line survey system.

Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback.

Significant changes that are made to a course as a result of such student feedback will be communicated to students by the Course Convenor at commencement of semester when the course is next run.

Correspondence and Email Messages

University policy states that official correspondence with a student will be made using the university provided email address and that it expects students will regularly check their official university email account. The School assists in this by providing free access to computing facilities and the internet.

In line with this policy, messages will be sent to students through their LTMS account. Students can retrieve messages from the mailbox in each LTMS course account.

Administrative Matters

Students should ensure they are familiar with the various policies related to expectations of students. Links to the Policies can be found on the School web page at www.mining.unsw.edu.au/information-about/our-school/policies-procedures-guidelines.
Equity and diversity: those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (www.equity.unsw.edu.au/disabil.htm).

Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made. Information on designing courses and course outlines that take into account the needs of students with disabilities can be found at www.secretariat.unsw.edu.au/acboardcom/minutes/coe/disabilityguidelines.pdf.