1. Staff

Position	Name	Email	Consultation times and locations	Contact Details
Course Convenor	Dr Kevin Laws	k.laws@unsw.edu.au	Room 301, School of Materials Science and Engineering (Building E10), by appointment	Phone: 9385 5234
Lecturer	Prof Sean Li	sean.li@unsw.edu.au	Room 520 Materials Science and Engineering (Bldg E10) by appointment	Phone: 9385 5986

2. Course information

Units of credit: 6

Pre-requisite(s): None

Timetabling website: http://timetable.unsw.edu.au/2022/MATS6001.html

Teaching times and locations:

	Lecture	Lecture	Lecture

Students become more engaged in the learning process if they can see the relevance of their studies to professional and disciplinary contexts

Students will be asked to analyse the role of materials processing in understanding various functional, microstructural & mechanical phenomena in materials science and how these properties influence the science and engineering of existing and new materials.

Lectures: The core concepts will be taught in lectures, students will have access to the lectures notes before class for annotation during the lecture. Students will be engaged in the learning process through class discussions and problem-solving questions independently and working together with partners and groups.

3.2 Expectations of students

Students must attend at least 80 % of all classes with the expectation that students only miss classes due to illness or unforeseen circumstances
Students must read through lecture notes and lab sheets prior to class
During class, students are expected to engage actively in class discussions
Students should work through lecture, tutorial and textbook questions
Students should read through the relevant chapters o

4. Course schedule and structure

This course consists of 48 hours of class contact hours. You are expected to take an additional 102 hours of non-class contact hours to complete assessments, readings and exam preparation spread over the term.

Week	Topics			Activity
1	Intro to Inorganic Materials (SL)	Semiconductor Properties (SL)	Semiconductor Materials Processing and Single Crystal Growth (SL)	
2	Thin Film Technology – Vacuum Evaporation (SL)	PLD and CVD methods (SL)	Nanomaterials Processing (SL)	
3	(Quiz 1)	Nanoparticles, Nanowires, CNT and Graphene (SL)	Chemical Processing of Materials (SL)	Quiz 1
4	Sustainable Materials Processing (SL)	Course Study Review (SL)	Mid-Term exam	Mid-term exam
5				
6				
7	Intro to Materials Processing (KJL)	Primary Metals Processing (KJL)	Casting Processes (I) (KJL)	
8	Casting Processes (II) (KJL)	Metal Rolling &	Forging Processes (KJL)	
9	(Quiz 2)	Joining Processes (I) (KJL)	Joining Processes (II) (KJL)	Quiz 2

5. Assessment

5.1 Assessment tasks

Assessment task	Description	Weight	Due date

- Assessment tasks are to be completed in class during the allocated time and handed in at the conclusion of the task.

5.4. Feedback on assessment

Quizzes: Feedback will be given two weeks after submission of the assignment and take the form of the mark for the assignment, overall comments on how the class performed, any common areas that were not answered correctly. Additionally, personal feedback and how each student performed may be given.

Midsession exams: Students will receive their marked exams indicating what questions were answered correctly and incorrectly. Overall comments and worked solutions may be provided to the class.

Final exam: Students will receive their final mark.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at https://student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits**:** honesty, trust, fairness, respect, responsibility and courage.[1] At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and **plagiarism** can be located at:

The *Current Students* site https://student.unsw.edu.au/plagiarism**,** and

The *ELISE* training site http://subjectguides.library.unsw.edu.au/elise/presenting

The *Conduct and Integrity Unit* provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

7. Readings and resources

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