



Course Outline

MATS4100

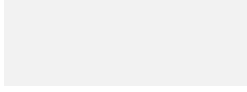
Materials Engineering Project

Materials Science and Engineering

Science

T3, 2022

1. Staff



2. Course information

Units of credit: 18, 6 per term

ENTRY POINT: Term 1

Pre-requisite(s): MATS3001, MATS3002 & MATS3004

Timetabling website:

4. Course schedule and structure

4.1 Professional Communication and Presentation Component

4.2 Research Project/Thesis Component

S

5. Assessment

5.1 Assessment Tasks & Milestones

The Professional Communication and Presentation component carries 20% of the course weighting. Assessment for this section is based on the following:

Presentation 1	(12 minutes)	8%
Presentation 2	(17 minutes)	12%

The research project/thesis component of the course carries a weight of 80% of total marks. Assessment is on the basis of the written work submitted. Please refer to the section below for details of the assessment and to the following section for expected content of the Honours Thesis. Unless otherwise stated, all work is to be submitted online to the MATS4100 Moodle site. Late work will attract penalties. The detailed assessment tasks related to the thesis are explained below. Students are encouraged to note the explanations below.

All Honours theses must be the student's own work. All references should be properly cited, and any plagiarism is forbidden in all parts of the thesis. (see Academic Honesty and Plagiarism Rules set out in this document). All theses will be run through an academic plagiarism-checking program. Any such academic misconduct could result in serious consequences in the assessment of the thesis.

Assessment task	Description	Weight	Due date
Seminar			
Presentation 1:			

	<p>conclusions. The seminar presentation is graded by the student's supervisor, the course coordinator, and one independent academic from the School.</p>		
<p>Honours Thesis Dissertation:</p>	<p>The Honours thesis dissertation is the major piece of written work submitted at the end of the 18UOC research project. An Honours thesis dissertation in Materials Science and Engineering is typically 80 pages which is marked by the supervisor and two nominated independent academic</p>		

UNSW assessment policy: <https://student.unsw.edu.au/assessment>

5.2 Assessment criteria and standards

Seminar Presentation 1 & 2

Each seminar is graded by the student's supervisor, the course coordinator, and one independent academic from the School using a standardised rubric to assess the following elements:

- ◁ Technical Content: technical standard, amount and adequacy of material, depth of coverage, interest of the material presented, ability to answer questions.
- ◁ Quality of Presentation: Structure – organisation of material, balance of the material presented, logic and orderliness of material, focus on important points, clarity of presentation. Verbal Delivery – pace, pronunciation and enunciation, voice modulation, avoidance of extraneous vocal mannerisms. Physical Delivery – control of nervousness, eye contact with audience, effective use of body movement, avoidance of extraneous physical mannerisms.
- ◁ Visual Impression: Visual Aids – pace of presentation, interest and effectiveness of visual aids, pertinence of visual aids to the presentation, legibility and quality of visual aids. Appearance – posture and deportment of speaker
- ◁ Overall Impression

Assessment for Presentation

11. The pacing of the spoken word was:
12. The pronunciation and enunciation were:
13. The smoothness of the verbal delivery was:
14. The volume, pitch and voice modulation were:
15. The avoidance of extraneous vocal mannerisms was:

MATS4100

Project Management Plan

This section carries 5% weight of the final mark.

Due: 5:00 pm, Friday, Week 4, Term 1

Submission: Upload to MATS4100 Moodle course site.

Coversheet: Coversheet (downloadable from the Moodle course site) must accompany the submitted plan, which must be signed by the academic supervisor to the effect that the plan is reasonable in terms of academic scope as well as the available time and resources.

Late Penalty: Work submitted after the deadline will attract a penalty of 10 mark of the Project Management Plan per day late (or part thereof) late. Submission of the Project Management Plan is a prerequisite to commencement of Term 2 of the project, failure to complete, student will be required to show cause for continuation to Term 2.

Marking: Marked by one marker nominated by the School.

Details: The aim of this assignment is to develop a project management plan for the Honours Project. The plan should include the following:

1. General Outline including:
 - a. Description of the project to be undertaken
 - b. General scope of the project
 - c. Critical personnel
2. Goals of the Project
3. Project Selection
4. Project Planning
5. Budgeting and Cost Estimation
6. Scheduling
7. Resource Allocation (including inventory & status of all equipment)
8. Monitoring and Project Control
9. Project Auditing
10. Project Termination

Length: Maximum 8 A4 pages

Assessment: Clarity, Presentation, and Structure	/10
Establishment of Goals & Approach	/10
Appropriateness	

Literature Survey

This section is a prerequisite for the continuation to Term 2 of the project.

Due: 5:00 pm, Friday, Week 10, Term 1

Submission: Upload a high-resolution pdf file of the Literature Survey and fronted by a signed coversheet to the MATS4100 Moodle course site.

Formative Assessment Sheet: A Literature Survey Formative Assessment Sheet must accompany the submitted Literature Survey, which must be filled and signed by the academic supervisor to the effect that the Survey is complete, of high standard and finished.

Late Penalty: Work submitted after the deadline will attract a penalty of 2 marks deducted from the total Honours Thesis Dissertation mark per day (or part thereof) late. Submission of the Literature Survey is a prerequisite to commencement of Term 1 of the project.

Formative Assessment: The Literature Survey is a Formative Assessment for the purpose of providing feedback about students' progress to the student, no formal mark is given to the literature

Thesis Progress Report MATS4100 (18 UoC)

Student: _____

Thesis Title: _____

(1) Achievements to Date (Bulleted short descriptions preferred)

(2) Delays to Project Plan: Outline Reasons

(3) Tasks remaining as per plan

(4) Changes to plan: Outline Justification

Student Name _____ Student Signature _____ Agree/Disagree

Supervisor Name _____ Supervisor Signature _____ Agree/Disagree

The Thesis Progress Report above is a mandatory part of the Honours thesis. Please ensure that all sections are duly filled and both signatures at the bottom of the page are acquired. This form is to be uploaded to the MATS4100 Moodle site 5pm Friday, Week 2 /Term 3

Honours Thesis Dissertation

This section carries 75% weight of the final mark.

Due: 5:00 pm, Friday, Week 10, Term 3

Submission: Upload a high-resolution pdf file to the MATS4100 Moodle course site.

Late Penalty: Work submitted after the deadline will attract a penalty of 10% deducted from the Honours Thesis Dissertation mark per day (or part thereof) late.

Marking: Examined by the thesis supervisor and one confidential examiner nominated by the School.

The Thesis is marked using a standardised rubric with marks being awarded for the following elements:

1. Quality of Abstract; English expression and spelling; Thesis formatting & general impression.
2. Introduction and Literature Survey Chapters: level of presentation, extent and relevance; critical assessment of the literature; referencing; establishment of project aims.
3. Experimental Procedure: completeness and clarity of experimental outline.
4. Results/Work Effort: amount of experimental work done, completeness of study, quality, logic and organisation of experiments, use of graphs, figures and tables to summarise results.
5. Discussion and Conclusions: level of understanding, interpretation of results and sophistication of analysis, handling and identification of errors, comparison with other data, achievements with respect to project aims.

The final thesis in MATS4100 should be a maximum of ~65 pages in total length. Guidelines detailing expected formatting of the thesis are given as part of Professional Communication and Presentation component of the course.

1. Abstract

This should be one page in length. It should briefly but succinctly summarise the following points: problem investigated; procedures followed; principal results obtained; and major conclusions reached.

7. Summary and Conclusions

This Chapter should be no more than four pages in length. It should summarise both the results and their ramifications. This section represents a brief overview of the findings and their significance.

8. References

This section lists full citations of literature references used in the thesis.

Note:

Honours Thesis Dissertation Marking Criteria

This section carries 75% weight of the final mark.

Student: _____

Thesis Title: _____

Examiner: _____ Signature: _____

		Adj. Mark
Abstract, Thesis Format and Presentation		
1. Quality of Abstract	/20	
2. English expression and spelling	/10	
3. Thesis formatting & general impression	/10	
	Mark: _____	_____ /10
Introduction and Literature Survey Chapters		
1. Level of presentation, extent and relevance	/10	
2. Critical assessment of the literature	/10	

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

Prescribed:

Students are required to purchase from the UNSW bookstore a workbook that will be used as an extensive source of reference material for the professional communication and presentation component by Professor Sorrell.

Recommended:

Your supervisor may recommend reading and resources that relate to your project.

8. Administrative matters

School Office: Room 137, Building E10 School of Materials Science and Engineering

School Website: <http://www.materials.unsw.edu.au/>

Faculty Office: Robert Webster Building, Room 128

Faculty Website: <http://www.science.unsw.edu.au/>

9. Additional support for students

- ◁ The Current Students Gateway: <https://student.unsw.edu.au/>
- ◁ Academic Skills and Support: <https://student.unsw.edu.au/academic-skills>
- ◁ Student Wellbeing, Health and Safety: <https://student.unsw.edu.au/wellbeing>
- ◁ Disability Support Services: <https://student.unsw.edu.au/disability-services>
- ◁ UNSW IT Service Centre: <https://www.it.unsw.edu.au/students/index.html>
- ◁ Assessment Implementation Procedure:
<https://www.gs.unsw.edu.au/policy/documents/assessmentimplementationprocedure.pdf>