



Mechanical and Manufacturing Engineering

Course Outline

Semester 2 2017

MMAN1300

ENGINEERING MECHANICS 1

Contents

1. Staff contact details	2
Contact details and consultation times for course convenor	2
Contact details for Head Demonstrator	2
Queries and consultation.....	2
Contact details and consultation times for additional demonstrators:.....	2
2. Important links	3
3. Course details	3
Idetaes0Su..0 Td a.....j (.y.....(det)A 0 Tdt)4.2(mdi)2.610.6(10.5(r)c -0.00Tc 0 Tw h0.5(r)e(.....(H	

1. Staff contact details

Contact details and consultation times for course convenor

Please refer to your class timetable for the learning activities you are enrolled in and attend only those classes.

Summary and Aims of the course

This is your first course in Engineering Mechanics, which is the study of the interaction of matter and forces in engineering contexts. It is evident that all objects in the world around us are composed of matter, and they are all subject to forces. As such, Engineering Mechanics is the foundational tool for engineers, and forms the underlying basis for understanding more advanced fields such as Solid Mechanics, Fluid Dynamics, Rigid Body Dynamics, Aerodynamics, Structures, Control and many aspects of Advanced Design.

For many of you, this course is a direct pre-cursor to two Year 2 courses: MMAN2400 Mechanics of Solids 1 and MMAN2300 Engineering Mechanics 2.

The aim of this course can be stated simply: For everyone involved (staff, students7if

4.

5. Course schedule

	Week	Topic	Quiz	Assignment, Lab work or Block Test	Suggested Readings
	1	Introduction to statics; vectors;			

Block 1

6. Assessment

Assessment overview

Assessment task	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date, time	Deadline for absolute fail	Marks returned
4 x Block Tests	45 mins each	24% (6 marks each)	1, 2, 3, 4	Demonstrating ability under exam conditions	Friday 6-7pm in weeks 4, 7, 10 and 13.	N/A	Within 2 weeks after each test
12 x Weekly PSS and Moodle quiz	Weekly	24% (1+1 marks each week)	1, 2, 3, 4	Weekly problem solving attempts, continued learning.	PSS: WK X+1 Quiz: 5pm Tuesday after, weeks 2-13	PSS: WK X+2 Quiz: No late submissions	Same day
2 x Individual Laboratory Reports + 1 assignment	10 pages max	12% (4 marks each)	1, 3, 4, 5	Correctness, completeness, professionalism of report	5pm Friday		

Assignments

Presentation

All submissions are expected to be neat and clearly set out. Your results are the pinnacle of all your hard work and should be treated with due respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect.

Submission

Late submissions will be penalised up to 5 marks per calendar day (including weekends). An extension may only be granted in exceptional circumstances. Special consideration for assessment tasks must be processed through student.unsw.edu.au/special-consideration.

It is always worth submitting late assessment tasks when possible. Completion of the work, even late, may be taken into account in cases of special consideration.

Where there is no special consideration granted, the 'deadline for absolute fail' in the table above indicates the time after which a submitted assignment will not be marked, and will achieve a score of zero for the purpose of determining overall grade in the course.

Marking

Marking guidelines for assignment submissions will be provided at the same time as assignment details to assist with meeting assessable requirements. Submissions will be marked according to the marking guidelines provided.

Examinations

You must pass the final exam in order to pass the course.

Inability to attend the block tests on one of these times for reasons such as work commitments, holidays etc. cannot, unfortunately, be accommodated with a class of this size. Of course, arrangements will be made for emergencies such as illness. Arrangements for each type of assessment are tabulated below.

Type of Assessment	
Block tests 1-4	No supplementary
Weekly assessment	PSS one week late, 0.5 marks and Moodle, no late submissions
Laboratory	Reports submission via Moodle
Final Examination	Standard UNSW special considerations for supplementary



sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

If plagiarism is found in your work when you are in first year, your lecturer will offer you assistance to improve your academic skills. They may ask you to look at some online resources, attend the Learning Centre, or sometimes resubmit your work with the problem fixed. However more serious instances in first year, such as stealing another student's work or paying someone to do your work, may be investigated under the Student Misconduct Procedures.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Further information on School policy and procedures in the event of plagiarism is available on the [intranet](#).

11 Administrativemattersand links

All students are expected to read and be familiar with School guidelines and polices, available on the intranet. In particular, students should be familiar with the following:

- x [Attendance, Participation and Class Etiquette](#)
- x [UNSW Email Address](#)
- x [Computing Facilities](#)
- x [Assessment Matters](#) (including guidelines for assignments, exams and special consideration)
- x [Academic Honesty and Plagiarism](#)
- x [Student Equity and Disabilities Unit](#)
- x [Health and Safety](#)
- x [Student Support Services](#)

Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
--	------------------------------------

PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals

PE1: Knowledge
and Skill Base