



Mechanical and Manufacturing Engineering

Course Outline  
Term 2 2020

**MMAN2300**

**ENGINEERING MECHANICS 2**

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# 1. Staff contact details

## Contact details and consultation times for course convenor and lecturers

Prof Zhongxiao Peng

## 3.6 Summary

**Day**





Week	Topics	Location	Suggested Readings
5	<p><b>Part A: Rigid Body Dynamics</b> Instant centre method 2</p> <p><b>Part B: Vibration Analysis</b> Base excitation and base isolation Summary of SDOF vibration analysis</p>	Online	<p>Chapter 5/5 Meriam et al. Chapter 4 Waldron &amp; Kinzel</p> <p>Week 5 vibration notes</p>
6	<b>Flexibility Week</b>		
7	<p><b>Part A: Rigid Body Dynamics</b> Acceleration analysis (review)</p> <p><b>Part B: Vibration Analysis</b> Free vibration of a 2-DOF system</p>	Online	<p>Chapter 5/6 Meriam et al.</p> <p>Week 7 vibration notes Chapter 5 Rao</p>
8	<p><b>Part A: Rigid Body Dynamics</b> Acceleration analysis - "Coriolis type" problems</p> <p><b>Part B: Vibration Analysis</b> Forced harmonic vibration of a 2-DOF system and vibration absorbers</p>	Online	<p>Chapter 5/7 Meriam et al.</p> <p>Week 8 vibration notes Chapter 5 Rao</p>
9	<p><b>Part A: Rigid Body Dynamics</b> Kinetics of rigid bodies 1</p> <p><b>Part B: Vibration Analysis</b> Fundamentals of vibration in continuous systems</p>	Online	<p>Chapter 6 Meriam et al.</p> <p>Week 9 vibration notes Chapter 8 Rao</p>

- Part A: Rigid Body Dynamics**  
Kinetics of rigid bodies 2
- 10 **Mock exam**  
During the scheduled lecture time for part B, there will be a m



# 6. Assessment

## Assessment Overview

Assessment	Group Project? (# Students per group)	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date and time	Deadline for absolute fail	Marks returned
Moodle tutorials (weeks 1-5,7-10)	No	2 hours	5%*	1, 2, 3, 5	Understanding of lecture material	Monday 5pm, week 11 (10 August 2020)		

# Assignments



## 8. Continuous improvement

Feedback on the course is gathered periodically using various means, including the UNSW

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

In this course, recent improvements resulting from student feedback include more worked examples in the lecture material, implementation of weekly online Moodle quizzes and redesign of the two laboratory exercises.

## 9. Academic honesty and plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: [student.unsw.edu.au/plagiarism](http://student.unsw.edu.au/plagiarism). The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also 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 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.

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](http://www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf)

## 10. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and policies. In particular, students should be familiar with the following:

[Attendance](#)

[UNSW Email Address](#)

[Special Consideration](#)

[Exams](#)

[Approved Calculators](#)

[Academic Honesty and Plagiarism](#)

[Equitable Learning Services](#)

