Course Outline

Semester 2, 2016

MECH4100

MECHANICAL DESIGN 2

Contents

Contact hours

Refer to Section 4: Course schedule for the day, time and location for each lecture, problem solving session, workshop, etc.

Prerequisites

MECH3110 and MMAN2300 (MMAN3300).

Summary of the course

This is the final Course in Mechanical Engineering Design. Here you will be expected to

Execute effective oral and written presentations to technical audiences.

This course is designed to address the learning outcomes below and the corresponding Engineers Australia Stage 1 Competency Standards for Professional Engineers as shown. The full list of Stage 1 Competency Standards may be found in Appendix A.

After successfully completing this course, you should be able to:

Learning Outcome		EA Stage 1 Competencies
1.	Implement the basic elements of managing a design project and be able to plan and schedule work activities in accordance with standard practice.	PE1.6, 2.1, 2.3, 2.4, 3.1, 3.4, 3.5, 3.6
2.	Apply an effective problem solving approach that is deliverable in practice and justify and defend the selection.	PE1.1, 1.4, 1.6, 2.1, 2.2, 2.3, 3.3

4. Course schedule

Week	Day	Date	Time	Activity	Location	Task Due
01	Thurs	28-Jul-16	9-10	Lecture 1: Introduction	J17-G03	
	Thurs		10-11	Lecture 2: Meeting etiquette		
	Thurs		11-12	Lecture 2: Meeting etiquette		
	Thurs					
	Thurs			No tute		
02	Thurs	04-Aug-16	9-10	Project Introductions	J17-G03	
	Thurs		10-11	Project Introductions		
	Thurs		11-12	Project Introductions		
	Thurs		12-13			T1
	Thurs		13-14	No tute		
03	Thurs	11-Aug-16	9-10	Lecture 3: Problem Definition	J17-G03	
	Thurs		10-11	Lecture 4: Reflective writing		
	Thurs		11-12	Lecture 4: Reflective writing		
	Thurs		12-13	(Client Meetings)		T2
	Thurs		13-14	(Client Meetings)		
04	Thurs	18-Aug-16	9-10	Lecture 5: Professionals Australia	J17-G03	
	Thurs		10-11	Lecture 5: Professionals Australia		
	Thurs		11-12	Lecture 5: Professionals Australia		T3
	Thurs		12-13	Group Session	J17-203/J17-204	
	Thurs		13-14	Group Session		
05	Thurs	25-Aug-16	9-10	Lecture 6: Exploring entrepreneurship	J17-G03	
	Thurs		10-11	Lecture 6: Exploring entrepreneurship		
	Thurs		11-12	Lecture 6: Exploring entrepreneurship		
	Thurs		12-13	Consultations/ Group Session	J17-203/J17-204	T4
	Thurs		13-14	Consultations/ Group Session		
06	Thurs	01-Sep-16	9-10	Lecture 7: Technical Presentation	J17-G03	
	Thurs		10-11	Lecture 7: Technical Presentation		
	Thurs		11-12	Lecture 7: Technical Presentation		
	Thurs		12-13	Consultations/ Group Session	J17-203/J17-204	
	Thurs		13-14	Consultations/ Group Session		
07	Thurs	08-Sep-16	9-10	Lecture 8: Fatigue Analysis	J17-G03	
	Thurs		10-11	Lecture 8: Fatigue Analysis		
	Thurs		11-12	Lecture 8: Fatigue Analysis		
	Thurs		12-13	Consultations/ Group Session	J17-203/J17-204	T9A
	Thurs		13-14	Consultations/ Group Session		

Week

For some assessment tasks you will split into groups and be required to attend different rooms. Details will be posted on Moodle prior to the assessments.

learning, you will compare how these relate to the current topic within the Course. You will sum-up questions you may and conclusions you have drawn.

T4 Consultation Sessions

You will meet with Course staffs to discuss your approach to your project. Your ability to define your problem, to plan ahead, in addition to your conduct during the meetings and consultation sessions will be assessed.

T5 Bear Pit

The Bear Pit is an opportunity for you to improve your oral communication skills through a focus on public speaking and persuasion. This activity requires your team to explain how the work is progressing, what the significant issues are for the design projects. Assessment will focus on the clarity, audibility, content knowledge and persuasiveness of your oral defence as judged by both your peers and academic staff.

T6A Final Presentation

This is where you will present your work to your client company. Your mark for this particular assessment will be determined by the demonstrators and Course staff - but remember: that

If plagiarism is found in your work when you