

# Mechanical and Manufacturing Engineering

# Course Outline Term 2 2019

# MANF9400 INDUSTRIAL MANAGEMENT

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#### 1. Staff contact details

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

Name: Dr Maruf Hasan

Office location: Room 208H, Building J17

Tel: (02) 9385 5629 Fax: (02) 9663 1222

Email: m.hasan@unsw.edu.au

Consultation is available with the lecturer-in-charge on Tuesdays and Fridays, 1100-1400 or at any other time by appointment.

#### Contact details and consultation times for additional lecturers/demonstrators/lab staff

Contact details and consultations times for demonstrators will be provided on Moodle before the start of Term.

Please see the course Moodle.

# 2. Important links

- Moodle
- Lab Access
- Computing Facilities
- Student Resources
- Course Outlines
- Engineering Student Support Services Centre
- Makerspace
- UNSW Timetable
- UNSW Handbook
- UNSW Mechanical and Manufacturing Engineering

#### 3. Course details

#### **Credit points**

This is a 6 unit-of-credit (UoC) course and involves 3 hours per week (h/w) of face-to-face contact.

The normal workload expectations of a student are approximately 25 hours per term for each UOC, including class contact hours, other learning activities, preparation and time spent on all assessable work.

You should aim to spend about 9 h/w on this course. The additional time should be spent in making sure that you understand the lecture material, completing the set assignments,

further reading, and revising for any examinations.

#### **Contact hours**

	Day	Time	Location
Lectures	Thursday	18:00-20:00	Ainsworth 202
Demonstrations	Thursday	20:00-21:00	Ainsworth 101
			Ainsworth 201

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**

The purpose of this course is to provide an understanding of the theories and principles of modern management and encourage the course participants to have an appreciation of these principles in relation to their own experiences and selected managerial case studies.

The aims of the course are to understand the basic principles of management and the four major functions of managers - i.e. planning, organizing, leading and controlling - and how managers actually operate. Students will be required to think critically and strategically about management theories and issues, which will enable them to develop their decision-making and analytical skills. They will be involved in application exercises and case studies which will assist them to develop graduate attributes.

#### Student learning outcomes

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:

Le	arning Outcome	EA Stage 1 Competencies		
1.	Understand the theories and principles of modern management and apply the concepts to the management of organisations in private and public sector.	PE 1.1, PE1.3, PE1.4, PE1.6		
2.	Understand how managers can effectively plan in today's dynamic environment, be familiar with the design of organisation structure and describe how environmental uncertainty affects organisation design.	PE 1.1, PE1.3, PE2.1, PE2.3, PE2.4		
3.	Identify what strategies organisations might use to become more customer oriented and be more innovative.	PE2.1, PE3.3		
4.	Describe contemporary theories of motivation and discuss the challenges managers face in motivating unique groups of workers.	PE 1.1, PE1.3, PE3.2, PE3.4, PE3.6		

# 4. Teaching strategies

Teaching strategies will include lectures, problem-solving sessions, group discussion of case studies and review questions, videos, and case studies presented by students. Students are expected to effectively participate in the class discussion and prior reading of the course material would be useful in this regard.

One multiple choice test (Mid-session test) will be held in the first half of the session in order to provide additional motivation for reading the book and to test the overall appreciation of the general concepts involved in the previous course material.

Group exercises will involve case application and video case application exercises in small groups. The number of people in a group should be three or four.

Students will be able to appreciate new issues and ideas confronting managers through the video clips that will be used in the course. They will also be able to appreciate how the principles learned relate to their own experience in work or in personal life. Issues involving ethics, sustainability, innovation and change, globalization and workforce diversity will be extensively dealt with in the course to enable the students to understand these principles. Group discussion of case studies and class presentation will allow communication and interaction of ideas and allow the students to comprehend how the principles of management can be applied in solving organizational problems.

### 5. Course schedule

Week	Topic	Text	Problem-solving session
1	Introduction of organizations and management and historical foundation of management	Ch 1& 2	Video
2	Organisational culture and the environment	Ch 3	Case study
3	Decision making	Ch 6	Case study
4	Foundations of planning	Ch 8	Case study/video
5	Strategic management	Ch 9	Case study
6	Organisation structure and design	Ch 12	
7	Human resources management.	Ch 14	Case study
8	Managing change and innovation	Ch 7	Case study
9	Motivating employees	Ch 17	Presentation
10	Controlling the organisation	Ch 10	Presentation

# 6. Assessment

#### **Assessment overview**

The assessment is by way of case study assignments, class tests and a major assignment as shown below:

Task	Assessment	Group Project? (# Students per group)	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date and submission requirements	Deadline for absolute fail	Marks returned
T1	Case study assignments	Yes (3 - 4)	2000 words	15 %	1,2,3,4	Topics assessed include conceptual and writing skills	Weeks 2, 3, 4, 5, 7, 8	Due in class	Two weeks after submission
T2	Mid-session test	No	1 hr, 40 multiple choice	20%	1,2	Lecture material from weeks 1 to 4	During week 6, M.S test period	N/A	Two weeks after mid-session test
Т3	Group Assignment	Yes (3 - 4)	5000 words	15%	1,2,3,4	Topics assessed include conceptual and writing skills	Week 10	N/A	Two weeks after submission
T4	Final exam	No	2 hours	50%	1, 2,3,4	All course content from weeks 5-10 inclusive	Exam period, date TBC	N/A	Upon release of final results

#### **Assignments**

Case study assignments will involve working in groups of 3 - 4 assigned on cases, submitting a short report and briefly presenting their findings at the end of demonstration sessions.

The Group Assignment (Wk 10) involves groups of 3 - 4 people. Each group will be required to choose an organization, conduct in-depth research into the management of the organisation and provide a presentation of their findings in Wk 9 and 10.

All non-electronic submissions should have a standard School cover sheet, which is available from this course's Moodle page.

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

Case study assignments are due on the scheduled day of the class in the week nominated above. The Group Assignment is due in Wk 10 and to be handed in at the end of the lecture.

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of 20 percent (20%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day.

Work submitted after the 'deadline for absolute fail' is not accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These are clearly indicated in the course outline, and such assessments receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark, or
- b. Online quizzes where answers are released to students on completion, or
- c. Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date, or
- d. Pass/Fail assessment tasks.

#### Marking

The following are the criterion for assessment:

- In-depth research of an organisation by collecting information, and analysing and interpreting the information.
- Critical evaluation of the issues and their possible solutions.
- Application of initiative and originality in interpreting facts and relating to the underlying concepts and conclusions.
- Skill in writing and presentation of the findings.

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**

The mid-session test will be multiple choice questions and will be used to test the knowledge and understanding of students in the course concept and methods.

There will be a two-hour examination at the end of the semester. The examination will consist of multiple choice questions as well as descriptive questions.

You must be available for all tests and examinations. Final examinations for each course are held during the University examination periods: February for Summer Term, May for T1, August for T2, and November/December for T3.

Please visit myUNSW for Provisional Examination timetable publish dates.

For further information on exams, please see the **Exams** webpage.

#### Calculators

You will need to provide your own calculator of a make and model approved by UNSW for the examinations. The list of approved calculators is available at student.unsw.edu.au/exam-approved-calculators-and-computers

It is your responsibility to ensure that your calculator is of an approved make and model, and to obtain an "Approved" sticker for it from the <u>Engineering Student Supper Services Centre</u> prior to the examination. Calculators not bearing an "Approved" sticker will not be allowed into the examination room.

#### Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to submitting an assessment or sitting an exam.

**Please note** that UNSW now has a <u>Fit to Sit / Submit rule</u>, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's Special Consideration page.

# 7. Expected resources for students

#### **Textbook**

Robbins, SP, Bergman, R, Stagg, I, and Coulter, M, Management, Prentice Hall, 2018, 8th edition.

The textbook is available for purchase at the UNSW bookshop.

#### References

- Bartol, K, Tein. M, Mathews, G, Martin, D, Management A Pacific Rim Focus, McGraw Hill. 2008.
- Davidson, P, Simon, A, Gottschalk, L, Hunt, J, Wood, G, Griffin, RW, Management Core Concepts and Skills, John Wiley and Sons, Australia, Ltd, 2006.
- Campling, J, Poole, D, Wisner, R, Schermerhorn, JR, Management, John Wiley and Sons, Australia, Ltd, 2006.
- Carlopio, J, Andrewartha, G, Armstrong, H, Developing Management Skills in Australia, Longman, 1997.
- Stoner, J, Collins, R, Yetton, P, Management in Australia, Prentice-Hall of Australia, 1994.
- Bounds, G, Dobbins, G, Fowler, O, Management A Total Quality Perspective, ITP, 1995.

#### **Recommended websites**

American Management Association (AMA) http://www.amanet.org is the world's leading membership-based management development organisation. AMA offers a full range of business education and management development programs for individuals and organisations in Europe, the Americas and Asia.

The following websites may also be of interest to you

- Australian Institute of Management <u>www.aim.com.au</u>
- Singapore Institute of Management www.sim.edu.sg
- Malaysian Institute of Management www.mim.org.my
- New Zealand Institute of Management <a href="http://imnz.net.nz/">http://imnz.net.nz/</a>
- Asian Association of Management Organisations aamo.net

The last website also has links to a range of other institutes/associations in the Asia Pacific region, such as Hong Kong, Japan, China, Thailand, India and Macau.

A website that offers quite a variety of press releases/articles is the Society for Human Resource Management (SHRM) site at <a href="https://www.shrm.org">www.shrm.org</a>.

Another avenue of search could be done through accessing Australian Financial Review's Boss website <a href="mailto:boss.afr.com.au">boss.afr.com.au</a>, where various websites can be found.

UNSW Library website: <a href="https://www.library.unsw.edu.au/">https://www.library.unsw.edu.au/</a> Moodle: <a href="https://moodle.telt.unsw.edu.au/login/index.php">https://moodle.telt.unsw.edu.au/login/index.php</a>

# 8. Course evaluation and development

Feedback on the course is gathered periodically using various means, including the UNSW myExperience process, informal discussion in the final class for the course, and the School's 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 previous year's feedback include providing more recent case studies and video clips, in-depth analysis of the cases, and including descriptive questions along with multiple choice questions in the final exam.

Please let me know your suggestions and comments throughout and even after the semester.

# 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: <a href="student.unsw.edu.au/plagiarism">student.unsw.edu.au/plagiarism</a>. 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. 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

#### 10. Administrative matters and links

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

- Attendance
- UNSW Email Address
- Computing Facilities
- Special Consideration
- Exams
- Approved Calculators
- Academic Honesty and Plagiarism
- Student Equity and Disabilities Unit
- Health and Safety
- Lab Access

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# 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	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
owi ≡ B	PE1.3 In-depth understanding of specialist bodies of knowledge
'E1: Knowledg and Skill Base	PE1.4 Discernment of knowledge development and research directions
PE1 an	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
ing ility	PE2.1 Application of established engineering methods to complex problem solving
neer Ab	PE2.2 Fluent application of engineering techniques, tools and resources
PE2: Engineering Application Ability	PE2.3 Application of systematic engineering synthesis and design processes
PE2 App	PE2.4 Application of systematic approaches to the conduct and management of engineering projects
_	PE3.1 Ethical conduct and professional accountability
PE3: Professional and Personal Attributes	PE3.2 Effective oral and written communication (professional and lay domains)
: Profession and Person Attributes	PE3.3 Creative, innovative and pro-active demeanour
3: Pr Ind I	PE3.4 Professional use and management of information
PE.	PE3.5 Orderly management of self, and professional conduct
	PE3.6 Effective team membership and team leadership