

# Mechanical and Manufacturing Engineering

# Course Outline Term 2 2020

# MANF9400 INDUSTRIAL MANAGEMENT

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#### 1. Staff contact details

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

Name: Dr Shiva Abdoli Tel: (02) 9385 6851

Email: s.abdoli@unsw.edu.au

Moodle: https://moodle.telt.unsw.edu.au/login/index.php

Microsoft Teams Video Chat Hours: Online Consultation is available with the lecturer-incharge on Tuesdays and Fridays, 11:00-14:00 or at any other time by appointment.

Please see the course Moodle.

# 2. Important links

- Moodle
- Lab Access
- Health and Safety
- 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 scheduled online 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	Delivery Mode
Lectures	Monday	18 pm – 20 pm	Moodle Recorded
Lectures		2 hrs/WK	Lectures
Demonstrations	Monday	20pm – 21pm	Microsoft Teams
Demonstrations		20piii – 21piii	Chat Channel

All classes in T2 2020 will be online. Please consult this course's Moodle module for details about delivery.

#### **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 need to 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 organizations 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 organization structure and describe how environmental uncertainty affects organization design.	PE 1.1, PE1.3, PE2.1, PE2.3, PE2.4
3.	Identify what strategies organizations might use to become more customer oriented and be more innovative.	PE2.1, PE3.3

Lea	arning Outcome	EA Stage 1 Competencies
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

The subject will be presented in the form of lectures and problem-solving classes. Weekly classes will consist of a 1.5 - 2 hrs lecture followed by a demonstration. The demonstration session includes group discussion of case studies and review questions. Group exercises will involve case application in small groups. The number of people in a group should be four or five. Students are encouraged to effectively participate in online discussion and present their case study results.

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 presentation will allow communication and interaction of ideas and allow the students to be active in the learning process and comprehend how the principles of management can be applied in solving organizational problems.

One Pre-Lecture online assessment (Not Graded) is provided in week one to assess the general knowledge of the students about the topic. The purpose is to prepare the students for the course and provide more resources if needed.

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

# 5. Course schedule

Week	Topic	Delivery Mode	Suggested Readings
1	Introduction of organizations and management and historical foundation of management	Online	Class readings Chapter 1 & 2
2	No Lecture/Public holiday		
3	Organizational culture and the environment	Online	Class readings Chapter 3
4	Decision making	Online	Class readings Chapter 6
5	Managing change and innovation	Online	Class readings Chapter 7
6	Foundations of planning	Online	Class readings Chapter 8
7	Strategic management	Online	Class readings Chapter 9
8	Controlling the organization	Online	Class readings Chapter 10
9	Organization structure and design	Online	Class readings Chapter 12
10	Human resources management.	Online	Class readings Chapter 14
11	Motivating employees	Online	Class readings Chapter 17

# 6. Assessment

#### **Assessment overview**

Assessment	Group Project? (# Students per group)	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date and submission requirements	Deadline for absolute fail	Marks returned
Group case study assignment	Yes (5)	2000 words	10%	1, 2, 3 and 4	Topics assessed include conceptual and writing skills	Tuesday 9 PM, Week 3, 4, 5, 6, 8, 9, 10	Sunday 9 PM, Week 3, 4, 5, 6, 8, 9, 10	One week after submission
Mid-Session test (Online)	No	10 multiple choice	25%	1,2	Lecture material from weeks 1 to 5	During week 7	N/A	One week after
Group Assignment	Yes (5)	5000 words	20%	1, 2, 3 and 4	Topics assessed include conceptual and writing skills	Monday 9 PM, Week 11	Sunday 9 PM, Week 11	Two weeks after submission
Final exam (Online)	No	3 hours	45%	1, 2,3 and 4	All course content from weeks 1-11 inclusive.	Exam period, date TBC	N/A	Upon release of final results

#### **Assignments**

Case study assignments will involve working in groups of 5 assigned on cases, submitting a short report and briefly presenting their findings at the end of demonstration sessions.

The Group Assignment involves groups of 5 people. Each group will be required to choose an organization, conduct in-depth research into the management of the organization and submit a written report.

#### Presentation

All submissions (reports of the case studies and the group assignment) 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

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:

- a. 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 organization by collecting information, and analyzing 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 on-line 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 three-hour on-line examination at the end of the semester. The examination will consist of multiple-choice questions as well as descriptive questions.

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.

#### 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 attempt 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 <u>Special Consideration page</u>.

# 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) <a href="http://www.amanet.org">http://www.amanet.org</a> 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 www.shrm.org.

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 student feedback include providing more recent case studies and including descriptive questions along with multiple choice questions in the final exam.

## 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
- <u>UNSW Email Address</u>
- Special Consideration
- Exams
- Approved Calculators
- Academic Honesty and Plagiarism
- Equitable Learning 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	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing			
owle ≡ 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	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)			
: Professiond Persona Attributes	PE3.3 Creative, innovative and pro-active demeanour			
3: Pr nd F Attı	PE3.4 Professional use and management of information			
P B	PE3.5 Orderly management of self, and professional conduct			
	PE3.6 Effective team membership and team leadership			