UNSW AUSTRALIA

Course Outline

Semester 1 2016

Never Stand Still | Engineering | Mechanical and Manufacturing Engineering

MANF6860

STRATEGIC MANUFACTURING MANAGEMENT

Contents

1. Staff Contact Details

Contact details and consultation times for course convenor

Name: Dr Bernard Kornfeld (Industry Lecturer)
Head of Operations
Lipa Pharmaceuticals Ltd
Tel: (02) 8796 1476 (Direct)
Email: bernardk@lipa.com.au

Name: Prof Sami Kara (Course convenor)
Office Location: 301A, Ainsworth Building
Tel: (02) 9385 5757
Email: S.Kara@unsw.edu.au

Consultation concerning this course is available on Monday 1300 –1800 whenever the lecturer is not otherwise engaged.

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

Name: Ms Shiva Abdoli (Demonstrator)
Office Location: 301, Ainsworth Building
Tel: (02) 9385 6851
Email: s.abdoli@unsw.edu.au

2. 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 UNSW website states “The normal workload expectations of a student are approximately 25 hours per semester for each UoC, including class contact hours, other learning activities, preparation and time spent on all assessable work. Thus, for a full-time enrolled student, the normal workload, averaged across the 16 weeks of teaching, study and examination periods, is about 37.5 hours per week.”

This means that 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.

There will be parallel teaching of MANF4450 – Strategic Manufacturing Management. The assessment scheme for these classes will be different based on the learning outcomes of the individual courses.

Contact Hours

	Day	Time	Location
Lectures	Monday	6pm - 9pm	
Demonstrations	Monday	6pm – 7pm	

Summary of the Course

This course introduces students the strategic aspects of manufacturing management, in terms of an analysis of the environment in which manufacturing companies compete. In particular, it explores the relation of manufacturing strategy to business, financial and marketing strategies

Aims of the Course

This course aims to provide an introduction to the strategic aspects of manufacturing management, in terms of an analysis of the environment in which manufacturing companies compete, the various dimensions of competitiveness, and how individual companies can maximise effective utilisation of their assets and hence increase their overall ability to compete.

Student learning outcomes

This course is designed to address the below learning outcomes 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.	understand the nature of manufacturing strategy and its relation to corporate strategy	PE1.3, PE1.5, PE2.3, PE3.6
2.	develop a systematic plan for strategy implementation	PE1.3, PE1.5, PE2.3, PE3.6
3.	understand the different types of globalised manufacturing and their implications	PE1.3, PE1.5, PE2.3, PE3.6
4.	appreciate the importance of linking performance monitoring to manufacturing strategy	PE1.3, PE1.5, PE2.3, PE3.6

3. Teaching strategies

The course will be presented in the form of lectures and demonstations. Each weekly class will consist of an hour of a demonstration example or case study related to the material covered in the previous lecture in the first hour and followed by 1-1.5 hrs lecture.

4. Course schedule

Date	Topic	Location	Lecture Content	Demonstration/Lab Content	Suggested Readings
29/2/16	Unit 1	CLB 6	The Nature and Role of Manufacturing Strategy	None	Unit 1 lecture notes and reading material on Moodle
7/3/16	Unit 2	CLB 6	Porter's Model and the Value Chain	Review of previous lecture and exercises	Unit 2 lecture notes and reading material on Moodle
14/3/16	Unit 3	CLB 6	Competitive Positioning	Review of previous lecture and exercises	Unit 3 lecture notes and reading material on Moodle
21/3/16	Unit 4	CLB 6	Cost Accounting & Capital Investment Valuation	Review of previous lecture and exercises	Unit 4 lecture notes and reading material on Moodle
28/3/16	**Mid-session Break**				
4/4/16	Unit 5	CLB 6	Product Technology and Process Choice	Review of previous lecture and exercises	Unit 5 lecture notes and reading material on Moodle
11/4/16	Unit 6	CLB 6	Process Positioning and Core Competencies	Review of previous lecture and exercises	Unit 6 lecture notes and reading material on Moodle

18/4/16	Unit 7	CLB 6	Capacity Strategies	Review of previous lecture and exercises	Unit 7 lecture notes and reading material on Moodle
25/4/16	**Public Holiday**				
2/5/16	Unit 8	CLB 6	Focused Manufacturing	Review of previous lecture and exercises	Unit 8 lecture notes and reading material on Moodle
9/5/16	Unit 9	CLB 6	Experience Curve, Efficiency and Productivity	Review of previous lecture and exercises	Unit 9 lecture notes and reading material on Moodle
16/5/16	Unit 10	CLB 6	Global Manufacturing and the Extended Enterprise	Review of previous lecture and exercises	Unit 10 lecture notes and reading material on Moodle
23/5/16	Unit 11 & 12	CLB 6	Linking Performance to Manufacturing Strategy 1&2	Review of previous lecture and exercises	Unit 11 and 12 lecture notes and reading material on Moodle
30/5/16	Unit 13	CLB 6	Strategy Formulation and Implementation	Integrated Case Study Presentations	Unit 13 lecture notes and reading material on Moodle

5. Assessment

Assessment Overview

Assessment	Length	Weight	Learning outcomes assessed	Assessment criteria	Due date and submission requirements	Marks returned
Assignment 1	5000 words	30%	1-4	Units from 1-5	On week 3 during the lecture	Three weeks after submission
Assignment 2	30%	20%	1-4	Units from 6-12	On week 12 during the lecture	Three weeks after submission)
Integrated Case Study	40%	50%	1-4	All course content from weeks 1-12 inclusive.	On week 13 during the lecture	Three weeks after submission

All assignments and assessment criteria will be made available on Moodle prior to the assessments.

Assignments

Presentation

All 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. Presenting them clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect.

Submission

Late submissions will be penalised 5 marks per calendar day (including weekends). An extension may only be granted in exceptional circumstances. Where an assessment task is worth less than 20% of the total course mark and you have a compelling reason for being unable to submit your work on time, you must seek approval for an extension from the course convenor ***before the due date***. Special consideration for assessment tasks of 20% or greater 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.

Examinations

You must be available for all tests and examinations. Final examinations for each course are held during the University examination periods, which are June for Semester 1 and November for Semester 2.

Provisional Examination timetables are generally published on myUNSW in May for Semester 1 and September for Semester 2

For further information on exams, please see the Exams section on the intranet.

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 shown 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 School Office or the Engineering Student Centre prior to the examination. Calculators not bearing an "Approved" sticker will not be allowed into the examination room.

Special Consideration and Supplementary Assessment

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

6. Expected Resources for students

A course manual will be made available on Moodle. This manual includes all the necessary lecture materials and the readings at the end of each unit. Since the manual is regularly updated, the previous version of the manual is not recommended.

Suggested additional readings

Relevant readings are provided at the end of each unit. However, further readings can be found in journals such as Harvard Business Review, Long Range Planning, Management Decision, Management Review, Journal of Management Studies, Californian Management Review, Sloan Management Review. These can be accessed via the UNSW Library http://info.library.unsw.edu.au/web/services/services.html

7. Course evaluation and development

Feedback on the course is gathered periodically using various means, including the Course and Teaching Evaluation and Improvement (CATEI) 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 changing the assessments from exam base to entirely project base and group work, and providing more real life case studies.

8. 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: 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. 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.

9. Administrative Matters

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:

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

Prof. Sami Kara
February 2016

Appendix A: Engineers Australia (EA) Professional Engineer Competency Standards

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
PE2: Engineering Application Ability	PE2.1 Application of established engineering methods to complex problem solving
	PE2.2 Fluent application of engineering techniques, tools and resources
	PE2.3 Application of systematic engineering synthesis and design processes
	PE2.4 Application of systematic approaches to the conduct and management of engineering projects
PE3: Professional and Personal Attributes	PE3.1 Ethical conduct and professional accountability
	PE3.2 Effective oral and written communication (professional and lay domains)
	PE3.3 Creative, innovative and pro-active demeanour
	PE3.4 Professional use and management of information
	PE3.5 Orderly management of self, and professional conduct
	PE3.6 Effective team membership and team leadership