TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



# School of Management

# **CMSP 804**

# **OPERATIONS AND SUPPLY CHAIN MANAGEMENT**

Trimester 2, 2016

# **COURSE OUTLINE**

Names and Contact Details

Course Coordinator:	Dr Arun A. Elias	
Office:	RH 1005, Rutherford House	
Email:	arun.elias@vuw.ac.nz	
Telephone:	463-5736	
Programme Administrator:	Nicky McInnes	
Office:	RH 1004, Level 10, Rutherford House	
Email:	nicky.mcinnes@vuw.ac.nz	

#### **Trimester Dates**

Teaching Period: Monday 11th July – Friday 14th October Study Period: Monday 17th October – Thursday 20th October Examination Period: Friday 21st October – Saturday 12th November (inclusive)

463-5367

#### Withdrawal from Course

Telephone:

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 22<sup>nd</sup> July 2016.
- 2. The standard last date for withdrawal from this course is Friday 23<sup>rd</sup> September 2016. After this date, students forced to withdraw by circumstances beyond their control must apply for permission on an '*Application for Associate Dean's Permission to Withdraw Late'* including supporting documentation. The application form is available from either of the Faculty's Student Customer Service Desks or <u>online</u>.

# Class Times and Room Numbers: Tuesday 17:40 – 19:30 RH LT3

# **Course Delivery**

The course will be delivered over a series of twelve two-hour lectures, which will include class discussions. It is expected that you will arrive at the class having read the assigned material and prepared to discuss it.

# **Group Work**

While the Victoria CMSP programme has a tradition of study group collaboration, there are important elements in the assessment process that are strictly individual. Collaboration on individual assignments is <u>not</u> allowed beyond general discussion as to how one might interpret the

nature of the assignment question. Please do not work together to formulate a response and do not loan out your completed individual assignments.

# **Expected Workload**

Workload expectations for this course are 10 hours per week for the 12 teaching weeks and 30 hours during the mid-trimester break.

#### Prescription

An overview of the fundamental concepts of operations and services management, emphasising the design and management of operating systems in service and manufacturing enterprises as a means of achieving organisational goals. Students will be exposed to the scope and importance of operations functions, quality management, process types, work standards and the roles of equipment, people and inventories in delivering quality. Consideration will be given to state of the art concepts, such as JIT, Kanban and Kaizan-continuous improvement.

# **Course Learning Objectives**

By the end of this course, students should be able to:

- Appreciate the importance, challenge and creativity involved in managing operations;
- Understand the scope, frameworks, and key issues in the field of operations management;
- Critically evaluate the operations strategies of real world organisations, in terms of stakeholder expectations and sustainable competitive advantage;
- Develop familiarity with the common tools used in operations management to improve the efficiency and effectiveness of operating systems;
- Develop the ability to think systemically to analyse operations management problems and propose improvements.

# **Course Content**

Operations Management deals with the design, operation, and improvement of the systems that create and deliver a firm's primary products and services. Like marketing and finance, operations management is a functional field of business with clear management responsibilities. This course aims to introduce students to the field of operations management, using a systems approach.

#### Readings

**Textbook:** Jacobs, F. R. and Chase, R. B. (2014) *Operations and Supply Chain Management*, 14<sup>th</sup> edition, Boston, MA: Irwin McGraw Hill.

#### Assessment

The Assessment Handbook will apply to all VUW courses: see <u>http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf</u>.

#### **Assessment Requirements**

Assignments are to be handed in directly to the Course Coordinator at the start of class. Students must also keep an electronic copy of their work.

# Course Assessment

Assignment	Value	Due Date
1. Describing an Operating System	15%	16 August 2016
2. Analysing and Improving an Operating System Presentation*	20%	11 October 2016
Report		
3. Class Exercises	10%	During lectures (from week 1 to week 10)
4. Class Test	5%	During the lecture on week 4
5. Final Examination	50%	21 Oct – 12 Nov

\* Presentations: 4<sup>th</sup> or 11<sup>th</sup> October 2016

# Assessment Guidelines

The paper consists of two projects, class exercises, class test, and a final examination. The first two assignments should be presented as management reports. The details of these assignments are given below:

# Describing, Analysing and Improving an Operating System

You will select an organisation as the host for your CMSP 804 assignments 1 and 2. In this organisation you should concentrate on an actual operation. The criteria for your selection of the organisation should include:

- It should be a real world organisation based in New Zealand
- It should perform an actual operation
- You should have access to observe the operation

*Selection of observation site*: There are very few limits on what you can observe. You cannot, however, rely on past experience or recollection for this exercise - you must observe an operation as it runs <u>now</u>. As examples, students interested in manufacturing will find operations ranging from job shops to assembly lines in the Wellington region. Students interested in services have a spectrum, which ranges from those as simple as a hair stylist, as complicated as air traffic control, and as subtle as an art exhibition. Those interested in public services might consider a police patrol, or spending a night in a homeless shelter.

One additional rule: be creative, get as close to the operating system as you can, whilst respecting the rights of individuals and organisations.

# Assignment 1: Describing an Operating System

This will be an individual assignment. You will describe an actual operation of your host organisation in its existing form. In your description you will:

- Present the existing operation as an operating system,
- Describe and evaluate the operations strategy involved
- Conduct a stakeholder analysis for the system and

• Develop a process map for the operating system that you observed

# Due Date: 16 August 2016

#### Value: 15%

Length: Maximum 6(six) A4 pages, double-spaced, 12 point Times New Roman font, excluding figures, tables and other exhibits.

# Assignment 2: Analysing and Improving an Operating System

You will select one of your group members' organisations for this assignment. You will analyse and improve the operating system you observed, using some of the operations management tools. In your project you will:

- Understand and improve the description presented by a group member as assignment 1
- Critically examine the operating system, using appropriate operations management tools discussed in this course
- Conduct a benchmarking study for the operating system
- Use other appropriate operations management concepts and tools to improve the operating system.
- Provide an individual reflection

# Report Due Date: 11 October 2016

# Value: 20% for Presentation and Report

Length: Maximum 20 (twenty) A4 pages, double-spaced, 12 point Times New Roman font, excluding figures, tables and other exhibits.

This project consists of two parts. First, the group will give a 15 minute presentation followed by about 10 minutes of discussion during any one of the following days: 4<sup>th</sup> or 11<sup>th</sup> October 2016. The dates for group presentation will be decided using a lucky draw. You also have to present a management report for this project (due date: 11 October 2016).

# **Assignment 3: Class Exercises**

Class exercises will be conducted during the lectures from week 1 to week 10. They will be based on the topics covered in that particular lecture. During the last 20-30 minutes of the class, students will discuss these exercises (e.g. case studies, numerical exercises) and submit the results before leaving the class. This will be a group assignment.

# Assignment 4: Class Tests

A class test (closed book) will be conducted during the beginning of the lecture on week 4. The test will be based on the topics covered in weeks 1 to 3. The test will consist of 10 multi-choice questions and is worth 5% of the course marks. This will be an individual assignment.

# **Assignment 5: Final Examination**

A three-hour final examination (closed book) will be held during the formal examination period. Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the following period:

Friday 21st October - Saturday 12th November (inclusive)

# Penalties

In fairness to other students, work submitted after the deadline will be subject to a penalty of 5% of the total marks available per day of lateness. Assignments more than one week late will not be accepted. A "zero" mark will be applied. In the event of unusual, unforeseen circumstances (e.g., serious illness, family bereavement), students should discuss waiver of the penalty with the course controller prior to the deadline date.

#### Use of Turnitin

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <u>http://www.turnitin.com</u>. Turnitin is an on-line plagiarism prevention tool which compares submitted work with a very large database of existing material. At the discretion of the Head of School, handwritten work may be copy-typed by the School and submitted to Turnitin. A copy of submitted materials will be retained on behalf of the University for detection of future plagiarism, but access to the full text of submissions will not be made available to any other party.

#### Examinations

Students who enrol in courses with examinations are obliged to attend an examination at the University at any time during the formal examination period. The final examination for this course will be scheduled at some time during the following period:

Friday 21st October - Saturday 12th November (inclusive)

If you cannot complete an assignment or sit a test or examination, refer to www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

#### **Class Representative**

A class representative will be elected in the first class, and that person's name and contact details made available to VUWSA, the course coordinator and the class. The class representative provides a communication channel to liaise with the course coordinator on behalf of students.

#### **Communication of Additional Information**

Additional information and information on any changes will be conveyed to students via class announcements and in written form on the university blackboard server for CMSP 804.

#### Student feedback

In 2015 student feedback included positive comments about the plant visit and therefore a plant visit is included in the 2016 course schedule.

Student feedback on University courses may be found at: <a href="http://www.cad.vuw.ac.nz/feedback/feedback\_display.php">www.cad.vuw.ac.nz/feedback/feedback\_display.php</a>

#### Link to general information

For general information about course-related matters, go to <a href="http://www.victoria.ac.nz/vbs/studenthelp/general-course-information">http://www.victoria.ac.nz/vbs/studenthelp/general-course-information</a>

# Note to Students

Your assessed work may also be used for quality assurance purposes, such as to assess the level of achievement of learning objectives as required for accreditation and academic audit. The findings may be used to inform changes aimed at improving the quality of VBS programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

\*\*\*\*\*

# Lecture Schedule – CMSP 804 – 2016

Week	Topics	Readings
1	Course Introduction	Chapter 1
	Nature of Operations Management	Class Exercise:
	Systems Approach to Operations Management	The Art of Systems Thinking
2	Operations Strategy	Chapter 2
	Competitive Dimensions	Reading 1
	Stakeholder Analysis	Class Exercise:
	2	Operations Strategy
3	Operating Systems Analysis -1	Chapter 9
	Process Mapping	Class Exercise:
	Blue Prints	100 Yen Sushi Case
4	Operating Systems Analysis -2	Chapter 12
	Quality Management	Class Exercise:
	Quality Control Tools	Hank Kolb Director Quality Assurance
5	Operating Systems Improvement Models	Reading 2
	Benchmarking	Class Exercise:
	Continuous Improvement	Benchmarking
6	Plant Tour	Chapter 7
		Class Exercise:
		Plant visit report
	Mid Trimester Break	
7	Statistical Quality Control	Chapter 13
	Statistical Process Control	Class Exercise:
	SPC Charts	SPC Charts
8	Project Management	Chapter 4
-	Lean Thinking	Class Exercise:
	Lean Six Sigma	Project Management
	6	5 2
9	Supply Chain Management	Chapter 16
	Outsourcing	Class Exercise:
		Supply Chain Management
10	Operating Systems Modelling	Reading 3
	Qualitative Modelling	Class Exercise:
		Systems Modelling
11	Operations Scheduling	Chapter 22
	Causal Loop Modelling	
	Group Project Presentations	
12	Course Revision	
	Student Evaluations	
	Group Project Presentations	