

## School of Management

# MGMT 312 SUSTAINABLE OPERATIONS

Trimester 1, 2013

## COURSE OUTLINE

---

### Names and Contact Details

#### COURSE COORDINATOR

**A/Prof Bob Cavana**

Room: RH 904, Rutherford House

Phone: 463 5137

Email: [bob.cavana@vuw.ac.nz](mailto:bob.cavana@vuw.ac.nz)

Website: [www.vuw.ac.nz/som](http://www.vuw.ac.nz/som)

#### ADMINISTRATOR

**Tricia Lapham**

Room: RH 1022, Rutherford House

Phone: 463 5397

Email: [tricia.lapham@vuw.ac.nz](mailto:tricia.lapham@vuw.ac.nz)

### Trimester Dates

Teaching Period: Monday 4 March – Friday 7 June

Study Period: Monday 10 June – Thursday 13 June

Examination Period: Friday 14 June – Wednesday 3 July (inclusive)

### Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before Friday 15 March 2013.
2. The standard last date for withdrawal from this course is Friday 17 May. 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.

## **Class Times and Room Numbers**

Lectures: Wednesday 1:40 – 3:30 pm in RHLT3

Tutorials in weeks 3, 4 & 6:

Tut A	Mon	2:40 – 3:30 pm	in	GBG05
Tut B	Mon	3:40 – 4:30 pm	in	GBG05
Tut C	Tues	9:30 – 10:20 pm	in	RWW414
Tut D	Tues	11:30 – 12:20 pm	in	GB117

Computer Labs will be at the same tutorial times in weeks 8-11, but held in the Railway Building computer laboratory in RWW402.

## **Course Content**

Product quality and excellent management of resources are two important factors that contribute to the survival or sustainability of an organisation. This course will provide an introduction to business sustainability, and focus on examining the basis of product and service quality, equipping students with analytical and practical tools that measure, and advance organisational improvement – a necessary condition for organisational sustainability. Current state of the art practices will be studied with emphasis on the genesis of total quality management, quality improvement tools, business excellence frameworks, ISO9000 standards and statistical quality controls for operations – including six-sigma techniques.

## **Course Learning Objectives**

By the end of the course, students should have the necessary skills to:

- LO1:* Understand the theoretical principles and frameworks underpinning quality management, continuous improvement, business excellence and organisational sustainability;
- LO2:* Apply appropriate statistical methods and other analytical approaches to quality management issues related to production and service organisations;
- LO3:* Critically evaluate the contribution of business excellence frameworks and sustainable operations practices within organisations;
- LO4:* Report and communicate effectively on quality improvement practices in managerial situations.

## **Course Delivery**

The course will comprise a series of formal lectures, readings, statistical experiments, industry speakers from organisations exemplifying quality and business excellence, in-class exercises and discussion. Emphasis will be placed on student participation. A series of regular tutorials and computer laboratories will also examine the practical aspects of recent lecture material where students will work in groups to examine, discuss and analyse problems or issues likely to arise in the field.

Lectures will be held for 2 hours per week.

Tutorials or computer laboratories will be for one hour per week for 7 of the 12 weeks of the trimester.

The planned course schedule is shown below. Note that it may be necessary to re-arrange topics or Industry Visitors if unexpected circumstances arise. Students will be given as much notice of any such changes as is possible.

### MGMT 312 Sustainable Operations Course Content & Schedule, 2013

WEEK	DATES	TOPICS	READINGS (1), (2)	TUTORIALS/ COMPUTER LABS (3)
1	6 Mar	Course overview Intro to sustainable operations & quality management	S&S Ch 12 E&L Ch 1	-
2	13 Mar	Sustainable production Sustainable business reporting <b>Industry Visitor:</b> Ms Penny Nelson, Executive Director, NZ Sustainability Business Council	Met al Ch 11	-
3	20 Mar	Foundations of quality management Focusing on customers	E&L Ch 4 & 5	Tut 1 – case 1
4	27 Mar	Workforce & process management	E&L Ch 6 & 7	Tut 2 – case 2
<i>EXTENDED EASTER BREAK</i>				
5	10 Apr	Strategic focus for performance excellence	E&L Ch 8	
6	17 Apr	Performance measurement	E&L Ch 12	Tut 3 – case 3 <i>Asst 1 due – Sust Ops Essay</i>
<i>MID-TRIMESTER BREAK</i>				
7	1 May	Baldrige framework for performance excellence <b>Industry Visitor:</b> Mr Mike Watson, CEO, NZ Business Excellence Foundation Ms May Haines, Manager Organisational Performance & Risk, Hutt City Council	E&L Ch 10	
8	8 May	Statistical methods in quality management	E&L Ch 6	Tut 4 – lab 1
9	15 May	Measuring & controlling quality	E&L Ch 8	Tut 5 – lab 2
10	22 May	Process improvement & Six Sigma	E&L Ch 9	Tut 6 – lab 3
11	29 May	<b>Group project presentations [Asst 2a]</b>		Tut 7 – <b>Group Presentations</b>
12	5 Jun	Leading, building & sustaining performance excellence Environmental issues <b>Industry Visitor:</b> Mr Andrew Wilks, Environmental Manager, VUW  Course review	E&L Ch 13 & 14	<i>Asst 2b due - Group Project Report</i> <i>Asst 2c due – Personal Reflections Essay</i>

**Notes:**

- (1) The E&L chapters & cases are from the course textbook *Managing for Quality and Performance Excellence, 9<sup>th</sup> ed.*, by JR Evans and WM Lindsay (2013).
- (2) Additional readings each week will be available on blackboard or distributed in class.
- (3) Tutorial and computer lab schedule to be announced on Blackboard.

## Expected Workload

A total of 150 hours of work is expected from students in this course. This consists of 31 hours of classes, eight hours per week outside classes during teaching weeks spent reading, studying and writing assignments, and a further 23 hours revising during mid-trimester break and study week.

## Readings

The *required* textbook is:

**Evans JR and Lindsay WM (2014). *Managing for Quality and Performance Excellence*, 9th edn., South-Western Cengage Learning, Mason OH.**

Available at Vicbooks (about \$150).

Also an e-book for the 8<sup>th</sup> edition of this textbook (about \$90 with a 2 year license) is available at the following web site:

<http://academybooks.co.nz/product/isbn/9781133460633/>

*Other textbooks relevant to the course include:*

Moscardo, Lamberton, Wells et al. (2013). *Sustainability in Australian business*. Milton, Qld: Wiley.

Samson, D., & Singh, P.J. (2008). *Operations Management: An Integrated Approach*. Melbourne: Cambridge University Press.

Rao, A., Carr, L., Dampolena, I., Kopp, R., Martin, J., Rafii, F., Schlesinger, P. (1996). *Total Quality Management: a cross-functional perspective*. New York, NY: John Wiley & Sons.

Slack, N., Chambers, S., & Johnston, R. (2010). *Operations Management* (6 ed.). Harlow: Pearson Education Ltd.

Gryna, F., Chua, R., De Feo, J., & Juran, J. (2005). *Juran's quality planning and analysis: for enterprise quality*: McGraw-Hill Science Engineering.

Gupta, P. (2007). *Six Sigma Business Scorecard* (2 ed.). New York, NY: McGraw Hill.

Other readings and resources will be made available via PDF on Blackboard or provided in class.

### Useful Internet Materials:

#### *New Zealand Websites:*

New Zealand Business Excellence Foundation. [www.nzbef.org.nz](http://www.nzbef.org.nz)

New Zealand Sustainable Business Council. <http://www.sbc.org.nz/>

Business New Zealand. <http://www.businessnz.org.nz/>

New Zealand Business Roundtable. <http://www.nzbr.org.nz/>

Natural Step New Zealand. <http://www.thenaturalstep.org/en/new-zealand>

Sustainable Business Network. <http://www.sustainable.org.nz/>

McGuinness Institute (Sustainable Futures). <http://mcguinnessinstitute.org/>

Sustainable Households. <http://www.sustainablehouseholds.org.nz/>

Ministry for the Environment. <http://www.mfe.govt.nz/>

#### *Sustainability Websites:*

Global Reporting Initiative (GRI). <http://www.globalreporting.org/>

World Business Council for Sustainable Development <http://www.wbcsd.org/>

Sustainable Development Commission (UK) (archive). <http://www.sd-commission.org.uk/>

#### *Operations/Quality Management Websites:*

Baldrige Performance Excellence Program. <http://www.nist.gov/baldrige/>

Operations Management Center (OMC). <http://www.mhhe.com/omc/index.html>

TQM/SPC software for EXCEL. <http://www.ganeshha.org/freesoft.html>

American Society for Quality (ASQ) website: <http://asq.org/index.aspx>

A site with free information and materials about TQM. <http://www.freequality.org>

Sources of publications and tools for TQM:

<http://www.goalqpc.com/>

<http://www.4ulr.com/products/productquality/index.html>

## Materials and Equipment

Students will require a basic scientific or statistical calculator to assist them with calculations. Such calculators may be used in examinations. Statistical tables and quality control tables will be provided where required.

## Group Work

While the course has a tradition of study group collaboration, there are important elements in the assessment process that are strictly individual. Collaboration on individual assignments is not 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. You will be expected and encouraged to work in groups on in-term cases and the group assignment.

A group assignment is required for Assignment 2. The objectives of this assignment include shared research and understanding of a valuable contribution to sustainable operations within an organisation. The topic, related to quality management, is to be briefly presented and discussed in tutorials or class in Week 8. All members of the group will receive the same assessed mark or grade for the submitted report, and no group may exceed four students. It is expected that the submitted Management Report shall be well referenced and, well explained in terms of theoretical background, as well as its ongoing relevance and value to an organisation. The report should also include some statistical analysis, and demonstrate the use of Excel spreadsheet or some alternative statistical software package. The report should clearly address the importance of the topic within the context of organisational sustainability. The maximum length for the report will be 3,000 words (excluding references, diagrams and appendices).

## Assessment Requirements

Assessment	Description (1)	Weight	Date Due
Assignment 1	Individual Sustainable Operations Essay (max 2,000 words) <i>[Assesses LO 1, 3 &amp; 4]</i>	25%	12 noon, Weds 17 <sup>th</sup> April
Assignment 2	(a) Group quality management project - oral presentation (10-15 mins) <i>[Assesses LO 4]</i>	5%	(a) In tutorials or class, Mon 27 – Weds 29 May
	(b) Group quality management project –written report (max 3,000 words) <i>[Assesses LO 2-4]</i>	10%	(b) 12 noon, Weds, 5 June (group report)
	(c) A personal reflection essay related to the group project (max 1,000 words). <i>[Assesses LO 3 &amp; 4]</i>	10%	(c) 12 noon, Mon 10 June (reflections essay)
Final Examination	A 3 hour closed book exam <i>[Assesses LO 1-4]</i>	50%	Fri 14 June – Wed 3 July
	<b>TOTAL</b>	<b>100%</b>	

(1) Further details of the assignments will be provided in class and made available on Blackboard.

## Handing in assignments

Assignments should be deposited in course **Box #26 on RH Mezzanine floor** as specified by Noon on due date. *Late assignments need to be delivered to Tricia Lapham in RH1022.* All completed assignments must have a cover sheet. The cover sheets are in Annex B for an individual assignment and Annex C for the group assignment. Students must also keep an electronic copy of their work archived in case the original assignment goes missing. Failure to do so will jeopardise any claim by you that your work was submitted in the rare cases where your work goes astray.

## Examinations

The examination is worth 50% of the total marks available for this course. It is closed book 3-hour examination. All material covered on the course is examinable.

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 period from Friday 14 June – Wednesday 3 July (inclusive).

## Referencing

There are many different styles of referencing and the Faculty of Commerce at VUW has decided to make APA (American Psychological Association) referencing style the common standard across the Faculty. The Commerce and Central Libraries hold the APA Style Guide. You can also access the information from the online VUW library site <http://www.victoria.ac.nz/library/research/reference/referencingguides.aspx>

## Penalties

Late assignments are to be handed in at **Level 10 Reception, Rutherford House, RH 1022**, during Reception Desk hours, **9am till 5pm Monday to Friday during term time**. An Administrator or Duty Receptionist will stamp the assignment with the date and time. Late assignments that do not have **the time and date and signed by** the Administrator for the course or Duty Receptionist, will incur late penalties from the time the Administrator receives it. Assignments left on the Reception Counter, or slid under the door of the Reception office will also incur penalties from the time and date they are recovered. Note that there is no provision to accept assignments on weekends or public holidays.

## Penalties – for Lateness

- (i) In fairness to other students, work submitted after any deadline will incur a penalty for lateness. **The penalty is 2 of the marks available (marks available means what the assignment is worth i.e. 20% or 20 marks)** for an assignment submitted after the due time on the due date **for each part day or day late**. (for example if an assignment is out of 20 and the assignment receives 50% then one day late means the mark will be out of 18 and the student will receive 50% of 18). **Closed University days, Saturdays, Sundays and public holidays** will be included when counting the number of days late. An assignment late day begins from the time the assignment is due. Assignments received **more than 7 days after the due date** will not be accepted and the student will **automatically fail the Mandatory Course Requirements**.
- (ii) Course Outlines provide a signal to students of forthcoming workload, dates of submission etc, and thus student study plans should take account of course requirements across all

courses. Consequently, workload issues related to other courses and employment will not be accepted as reason for dispensation from mandatory requirements or waiver of penalties. **Extensions** to submission deadlines for any assigned work will only be granted in **exceptional circumstances**.

- (iii) Students who are unable to comply with any of the mandatory requirements should make a written application for an extension to the due date for submission of assigned work or for waiver of a penalty, **in advance**, to the **Course Coordinator**, providing documentary evidence of the reasons of their circumstances.
- (iv) All such applications must be made **before** the deadline and be accompanied by documentary evidence, e.g. a medical certificate, or counsellor's report clearly stating the degree of impairment, and the dates the illness or event prevented you from undertaking your academic studies. This can be applied retrospectively.
- (v) In the event of unusual or unforeseeable circumstances (e.g. serious illness, family bereavement or other exceptional events), that precludes an application in advance, students should make contact with the **Course Coordinator** as soon as possible, and make application for waiver of a penalty as soon as practicable.
- (vi) Word limits should be adhered to, especially so when they provide a guide to limiting the student's coverage of a topic and the intended assignment work load. You are strongly advised to adhere to the word limit so as to keep your workload at a manageable level. Any material that is above the word limit may not be taken into account by the marker. Your marker will simply stop at the maximum words for the assignment and you will receive the appropriate grade.

### **Remarking**

Every attempt is made to ensure that the marking is consistent across tutors and fair to students. Students may ask for their written work to be remarked. A different tutor will do the remarking and provide comments.

For marks: If the mark differs by 10% or less the two marks are averaged. If it exceeds 10% then it is independently marked by a third marker and the average of the two closest marks is taken.

For grades: If the grade differs by one grade then the highest grade is taken. If the grade differs by more than one grade then the assignment is marked by a third marker and the average grade is taken.

Experience from previous years is that almost all remarks are within 10% or one grade and where there is a change in mark or grade, half the assignments go up and half go down. Occasionally there is a significant shift in the mark or grade. Application for remarks must be made within 5 days after the assignments are available. To apply for a remark, complete the request for re-examination of assessed work form (Annex A) stating which sections (criteria listed in the mark sheet) you wish re-examined. Write on why you think the mark does not, in your view, fairly reflect the quality of your work. Hand this with your assignment into the following place:

- Pipitea Campus – the **Reception Desk** on Level 10 Rutherford House where your assignment will have the **time, date and signature** noted on the front cover by the person receiving it.

Allow a minimum of 5 days for remarks to be completed.

### **Use of Turnitin**

Student work provided for assessment in this course may be checked for academic integrity by the electronic search engine <http://www.turnitin.com>. 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.

## **Mandatory Course Requirements**

To meet Mandatory Course Requirements, students are required to:

- a. submit all written assignments within one week of the scheduled date;
- b. present the group project on the scheduled date and time; and
- c. obtain at least 40 per cent (i.e. 20 marks out of 50) of the final examination marks available.

Students who fail to satisfy the mandatory requirements for this course but who obtain 50% or more overall, will be awarded a "K" grade.

Standard fail grades (D or E) will be awarded when the student's overall course mark falls below the minimum pass mark, regardless of whether the mandatory course requirements have been satisfied or not.

Notice of Failure to meet Mandatory Course Requirements will be posted on Blackboard.

## **Grading Guidelines**

The following broad indicative characterisations of grade will apply in grading assignments and the exam:

A+	excellent performance in all respects at this level
A	excellent performance in almost all respects at this level
A-	excellent performance in many respects at this level
B+	very good, some aspects excellent
B, B-	good but not excellent performance at this level
C+, C	work satisfactory overall but inadequate in some respects
D	poor performance overall, some aspects adequate
E	well below the required standard
K	failure to achieve mandatory course requirements and have achieved at least an average "C" over all the assessment. Note this is a failing grade.

## **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**

Information on course-related matters will be announced at class and posted on the **Blackboard** website at <http://blackboard.vuw.ac.nz/>. It will be crucial for you to regularly check Blackboard for messages, announcements and materials.

## **Link to general information**

For general information about course-related matters, go to

<http://www.victoria.ac.nz/vbs/studenthelp/general-course-information>

## **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.

\*\*\*\*\*

ANNEX A

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



School of Management

MGMT 312

Request for re-examination of assessed work

	Assessment affected <i>e.g. Individual Assignment, In-class Test</i>	
Student ID	Name <i>As it appears in your enrolment</i>	Tutorial No/Tutor's name
Contact Details	Phone _____ Email _____	

**Specify which section (criteria specified in the mark sheet) you wish to be re-examined**

*Note: requests to re-examine "all" criteria will not be considered.*

---

---

---

---

---

---

---

---

**Clearly state why you believe each of these sections should be re-examined:**

*Note: "I think it is worth more," is insufficient.*

---

---

---

---

---

---

---

---

In requesting a re-examination of my submitted work, I understand that the result may be an increase OR decrease in the mark obtained.

.....  
Signature Date

**ANNEX B**



**School of Management**

**MGMT 312 Individual Assignment Cover Sheet**

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

Date Due: \_\_\_\_\_

Date Submitted: \_\_\_\_\_

*I have read and understood the university policy on Academic Integrity and Plagiarism.  
I declare this assignment is free from plagiarism.*

Signed: \_\_\_\_\_

Extension of the due date (*if applicable*)

**Please attach a copy of the note authorising your extension.**

Date extension applied for: \_\_\_\_\_

Extension granted until: \_\_\_\_\_

Extension granted by: \_\_\_\_\_

ANNEX C



**School of Management**  
**MGMT 312 GROUP Assignment Cover Sheet**

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

Lecturer's Name: \_\_\_\_\_

Date Due: \_\_\_\_\_

Date Submitted: \_\_\_\_\_

*We, the undersigned, have read and understood the university policy on Academic Integrity and Plagiarism. I declare this assignment is free from plagiarism.*

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_

**We agree to an equal share of the marks awarded Yes / No (Please circle)**

If **No**, please attach a letter detailing your preferred split of marks, **signed by all group members**.

**If an extension has been granted, please attach a copy of the note authorising your extension.**

*Date extension applied for:* \_\_\_\_\_

*Extension granted until:* \_\_\_\_\_

*Extension granted by:* \_\_\_\_\_