

#### VICTORIA MANAGEMENT SCHOOL

#### **MMMS 504**

## QUALITY MANAGEMENT AND CONTINUOUS IMPROVEMENT

Trimester Two 2007

### **COURSE OUTLINE**

#### Instructors

# L. M. Corbett (Course coordinator)

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Office hours: open door or contact me for an appointment

# S. Gopinathan (Visiting Professor)

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## Where and when do we meet?

Wednesdays 1440-1730 RH G01

## **Course Objectives**

The management and improvement of an organisation's quality is critical in today's business environment. The experience of New Zealand manufacturers, for example, after the dislocative effects of the economic deregulation of the late 1980s has shown that improving their quality was one of the first strategies adopted in order to increase their chances of survival. The quality of an organisation's products and services can be an order winner, though increasingly it can be argued that it is an order qualifier – it is something customers expect – and if they slip up in any way the consequences to sales, profitability and reputation can be massive and long-lasting.

By the end of this course, MMS students should:

- have a working knowledge of quality management and how it applies to the management and improvement of business processes
- be able to use the most common quality, problem-solving, and process improvement tools
- be proficient in communicating quality and problem solving activities and outcomes to others
- be able to discuss and debate the major TQM philosophies;
- understand the strategic role of quality in modern global economic competition by fully understanding the relationship of quality to productivity;
- understand the role of management in attaining and sustaining excellence in quality;



#### Course Content

There are three broad areas that will be covered in this course

The Quality System

- introduction to quality
- meaning of quality
- quality philosophies
- international quality systems, ISO9000
- teams and HR focus

Quality and the Management System

- basic quality tools
- problem solving, creativity and TRIZ
- management and planning tools
- voice of the customer

Quality and the Technical System

- quality function deployment
- statistical process control
- process capability
- six sigma
- design for experiments and robust design

#### **Expected Workload**

This is a 15 pt course. It is designed to require an average of 10 hours of work outside the scheduled class time each week, although there is some variability week to week. Of course your own experience may vary due to differences in reading ability, computer skills, level of personal organisation, etc. Please let us know if this estimate is substantially inaccurate.

## Grading

- The quality of your individual project (20%) \
- Research essay on quality-related topic (20%)
- Technical system assignment (20%)
- Final exam (40%)

## Readings

Required text (available from Vic books)

Quality Management, Gitlow et al, 3ed, McGraw-Hill Irwin

Other readings and case studies will be handed out, made available in the library, or made available online.

# **Assessment Requirements**

- Individual quality improvement project (see handout) 12 pages max including any tables and graphics. A progress report (2 pages max) is due by August 17, and final report due before class on October 10. In the final report, answer the questions in the handout and in addition, carefully critique your own graphics as if you were Tufte (see readings).
- Quality research essay (due in class week 10). Students will be required to review some quality
  management literature related to some topical issues in the field and discuss their findings in an
  essay. More details provided on separate handout.

• Technical system assignment: see separate handout.

# **Mandatory Course Requirements**

- Obtain 40% of in-term marks available
- Obtain 40% of total marks available in final exam.

## Weekly Class Schedule (draft)

Week Number	Date	Topic
1	July 11	Course introduction
		The meaning of quality
		The fundamentals of quality
		Read Gitlow ch 1
2	July 18	The leading quality philosophies, Deming etc
		Read Gitlow ch 2
3	July 25	Defining and documenting processes
		Read Gitlow chs 3 & 4
4	August 1	Introduction to basic probability and statistics
		Read Gitlow ch 5
5	August 8	Attribute and variable control charts
		Read Gitlow ch 6-9
6	August 15	Process capability
	_	Read Gitlow ch 11
7	Sept 5	Design of experiments
		Read Gitlow ch 12
8	Sept 12	The tools of quality control
	_	Read Gitlow ch 10
9	Sept 19	Six sigma
		Read Gitlow ch 20
10	Sept 26	Six sigma
11	Oct 3	TRIZ and design quality
12	Oct 10	Administrative systems for quality management
		Course review

## Communication of Additional Information

Any additional information will be posted on Blackboard or emailed to the whole class.

# Referencing

There are many different styles of referencing and the Faculty of Commerce & Administration 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.vuw.ac.nz/library/resources/virtualref.shtml#style).

# HANDING IN ASSIGNMENTS

Students must prepare two copies of each hand-in and keep the second copy for their own reference. 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.

#### GRADING GUIDELINES

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

## **PASS** grades

A+	excellent performance in all respects
A	excellent performance in almost all respects
Α-	excellent performance in many respects
B+	very good, some aspects excellent
В, В-	good but not excellent performance
C+, C	work satisfactory overall but inadequate in some respects
	FAIL grades
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.

## PENALTIES - for Lateness & Excessive Length of Assignments

- (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 for an assignment submitted after the due time on the due date for each part day or day late. Saturdays, Sundays and public holidays will be included when counting the number of days late.
- (ii) Course Outlines provide a signal to student 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.
  - All such applications must be made **before** the deadline and be accompanied by documentary evidence, e.g. a medical certificate, or counsellor's report that indicates the degree of impairment, and for how long the student has been impaired. Please be sure to ask at the time of consultation for the degree of impairment to be stated in any certificate you provide to support your case.
- (iv) In the event of unusual or unforeseeable circumstances (e.g. serious illness, family bereavement), 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.
- (v) Word limits should be adhered to, especially so when they provide a guide to limiting the student's coverage of a topic. The penalty will be 5% of the grade for an assignment which is 5% over the word limit.

# Faculty of Commerce and Administration Offices

## Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

## Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office is available for the following:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

## General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar available in hard copy or under 'About Victoria' on the VUW home page at www.vuw.ac.nz.

#### Student and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps are to be taken if there is a complaint. For information about complaint procedures under the Statute on Student Conduct, contact the Facilitator and orrefer to the statute on the VUW policy www.vuw.ac.nz/policy/studentconduct. The Policy on Staff Conduct can be found on the VUW website at www.vuw.ac.nz/policy/staffconduct.

## **Academic Grievances**

If you have any academic problems with your course you should talk to the tutor or lecturer concerned; class representatives may be able to help you in this. If you are not satisfied with the result of that meeting, see the Head of School or the relevant Associate Dean; VUWSA Education Coordinators are available to assist in this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website at www.vuw.ac.nz/policy/academicgrievances.

## Academic Integrity and Plagiarism

Academic integrity is about honesty – put simply it means **no cheating**. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other student or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalised severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website at www.vuw.ac.nz/home/studying/plagiarism.html.

## Students with Impairments

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities the same opportunity as other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services (DSS) to discuss your individual needs and the available options and support on a confidential basis. DSS are located on Level 1, Robert Stout Building, telephone (04) 463 6070, email disability@vuw.ac.nz. The name of your School's Disability Liaison Person is in the relevant prospectus or can be obtained from the School Office or DSS.

## **Student Support**

Staff at Victoria want students to have positive learning experiences at the University. Each Faculty has a designated staff member who can either help you directly if your academic progress is causing you concern, or quickly put you in contact with someone who can. Assistance for specific groups is also available from the Kaiwawao Māori, Manaaki Pihipihinga or Victoria International.

In addition, the Student Services Group (email student-services@vuw.ac.nz) is available to provide a variety of support and services. Find out more at www.vuw.ac.nz/st\_services/.

VUWSA employs Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and Faculty delegates. The Education Office (tel. 04 463 6983 or 04 463 6984, email education@vuwsa.org.nz) is located on the ground floor, Student Union Building.

# Manaaki Pihipihinga - Maori and Pacific Mentoring Programme (Faculty of Commerce and Administration)

This is a mentoring service for Maori and Pacific students studying at all levels. Weekly one hour sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade, and Room 210 and 211, Level 2, Railway West Wing. Sessions cover drafting and discussing assignments, essay writing, and any questions that may arise from tutorials and/or lectures. A computer suite networked to Cyber Commons is available for student use.

To register with Manaaki Pihipihinga, please contact one of the following:

Puawai WeretaFa'afoi SeiuliRoom 210, Level 2Room 109 BRailway West Wing14 Kelburn ParadeTel. (04) 463 8997Tel. (04) 463 5842

Email: Puawai.Wereta@yuw.ac.nz
Email: Faafoi.Seiuli@yuw.ac.nz