

Victoria Management School

**MMBA 508**  
**PROBLEM SOLVING & DECISION MAKING**

Trimester One 2010

**COURSE OUTLINE**

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**CONTACT DETAILS**

**COURSE COORDINATOR**

**Dr Jim Sheffield**

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**LECTURER**

**A/Prof Bob Cavana**

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**PROGRAMME ADMINISTRATOR**

**Linda Walker**

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**ADMINISTRATOR FOR**

**JIM SHEFFIELD AND BOB CAVANA**

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**Withdrawal dates: Late withdrawals with Associate Dean (Students) permission**

**(See Section 8: Withdrawals - from the Personal Courses of Study Statute)**

<http://policy.vuw.ac.nz/Amphora!~~policy.vuw.ac.nz~POLICY~000000001743.pdf>

**Withdrawal dates: refunds:**

<http://www.victoria.ac.nz/home/admisenrol/payments/withdrawalsrefunds.aspx>

**CLASS TIMES AND ROOM NUMBERS**

**Start Date:** Monday, 1 March 2010  
**Lecture Times:** Mondays, 5:40 – 7:30pm  
**Location:** Rutherford House LT 3  
**Format:** One two-hour session each week.

**Teaching Period: Monday 1<sup>st</sup> March – Friday 4<sup>th</sup> June 2010**

**Study Period: Monday 7<sup>th</sup> June – Thursday 10<sup>th</sup> June 2010**

**Final Examination Period: 11<sup>th</sup> – 30<sup>th</sup> June 2010** [3 hour closed book exam]

## **Introduction**

The Master of Business Administration Programme serves to produce professional managers capable of fulfilling strategic roles within corporate and government enterprises. Integral to this capability is an understanding of the dynamics of human behaviour in organisational settings.

The essential focus of this course is to build an understanding of problem-solving and decision-making processes. The course provides a multiple perspective approach to the framing and solution of problems, and critically examines alternative approaches to managerial decision-making, allowing students to develop insights and understanding about the nature of problem-solving and decision-making. The aim of the course is to provide students with an introduction to a range of relevant ideas and issues that will allow for the development of competencies to improve their problem solving and decision-making processes.

## **Course Objectives & Related Content**

The course has several objectives, some of which include:

- understanding the variety of ways in which decisions are and can be made
- understanding the role and impact of risk, uncertainty, ambiguity, preferences, judgement ...  
... on decision-makers and decision-making
- understanding the roles of intuition and analysis in decision-making
- exploring ways of approaching a range of typical problems and decision situations
- improving your competence in structuring problems using formal and informal methods
- applying systems thinking concepts to managerial decision making
- developing your analytical skills in data handling and interpretation
- heightening your awareness of the problem-solving process inherent in decision-making
- exposing you to a range of problems and decision-making situations ...  
... in different functional areas of management, at strategic and operational levels
- developing familiarity with typical decision trade-offs & evaluation techniques
- familiarising the student with the use of the computer-aided methods in decision making
- developing an ability to devise robust strategies and make balanced decisions.

## **General Learning Objectives**

On successful completion of the course, you should be able to:

- demonstrate an understanding of the major frameworks and concepts ...  
... under-pinning successful problem-solving and decision analysis
- use such frameworks to develop an understanding of managerial decision situations
- demonstrate competence in using a range of methods in problem solving & decision-making.

## **Specific Learning Objectives**

On successful completion of the course, you should be able to:

- demonstrate an awareness of the frames you use in making a decision
- consciously change frames
- demonstrate an awareness of the common pitfalls in decision making  
and the limitations of intuitive decision making
- demonstrate an informed decision making style
- structure a managerial decision problem in appropriate ways
- identify key factors and relationships in a decision and  
...structure the problem to explore such relationships, and in doing so  
... develop an enhanced understanding of a problem, the impact of possible actions &  
... draw valid conclusions.

## MGMT 508 - Weekly Schedule 2010

Week Dates	Lecturer	Topics	Readings (* = textbook)
<b>W1</b> 1 Mar	<b>BC</b>	Course Overview <b>Intro to Systems Thinking</b> <ul style="list-style-type: none"> <li>• Decision processes &amp; models</li> <li>• Problem structuring</li> </ul>	Gore, Murray & Richardson (1992) Dearlove (1998) Daellenbach (1994) * Maani & Cavana (2007), Ch 1 & 2
<b>W2</b> 8 Mar	<b>BC</b>	<ul style="list-style-type: none"> <li>• Causal loop diagrams</li> <li>• Behaviour over time charts</li> </ul>	* Maani & Cavana (2007) Ch 3, pp 28-39, 52-58, & Case 1 Cavana, Boyd & Taylor (2007) Sterman (2000)
<b>W3</b> 15 Mar	<b>BC</b>	<ul style="list-style-type: none"> <li>• Systems archetypes</li> <li>• Group model building</li> </ul>	Senge (1990) Sterman (2000) * Maani & Cavana (2007) Ch 3, esp. pp39-51, Ch 7 & Case 3
<b>W4</b> 22 Mar	<b>BC</b>	<b>Decision Analysis</b> <ul style="list-style-type: none"> <li>• Review of probability concepts</li> <li>• Payoff tables</li> </ul>	Target (1996) Ch 3 Ragsdale (2008) Ch 15
<b>W5</b> 29 Mar <b>Assignment 1 Due</b>	<b>BC</b>	<ul style="list-style-type: none"> <li>• Decision trees</li> <li>• Sensitivity analysis</li> <li>• Policy analysis</li> </ul>	Target (1996) Ch 3 Ragsdale (2008) Ch 15 Cavana (2004)
<b>Mid-Trimester</b>			<b>Break</b>
<b>W6</b> 19 Apr	<b>JS</b>	<b>Intro to Human Decision Behaviour</b> <ul style="list-style-type: none"> <li>• Judgment and desire in managerial decisions</li> <li>• Winning managerial decisions</li> </ul>	Morse (2007) Bazerman (2006) Russo & Schoemaker (2002)
<b>W7</b> 26 Apr	<b>JS</b>	<ul style="list-style-type: none"> <li>• Biases and heuristics</li> <li>• Framing decision problems</li> </ul>	Pfeffer & Sutton (2007) Bazerman (2006) Russo & Schoemaker (2002)
<b>W8</b> 3 May	<b>JS</b>	<ul style="list-style-type: none"> <li>• Roles in organizational decisions</li> <li>• Improving individual/group decision behaviour</li> </ul>	Rodgers & Blenko (2007) Bazerman (2006) Russo & Schoemaker (2002)
<b>W9</b> 10 May	<b>JS</b>	<ul style="list-style-type: none"> <li>• Common investment mistakes</li> </ul>	Bazerman (2006)
<b>W10</b> 17 May	<b>JS</b>	<b>Managing projects</b> <ul style="list-style-type: none"> <li>• Critical Path Scheduling</li> </ul>	Newbold (1998)
<b>W11</b> 24 May <b>Assignment 2 due</b>	<b>JS</b>	<ul style="list-style-type: none"> <li>• Critical Chain Scheduling</li> </ul>	Srinivasan (2007)
<b>W12</b> 31 May	<b>JS / BC</b>	<b>Integration</b> <ul style="list-style-type: none"> <li>• Course review</li> <li>• Exam briefing</li> </ul>	

\* Key to Lecturers: BC = Bob Cavana, JS = Jim Sheffield

## Approach

- 1 Course activities are structured so that you may **learn by 'doing and using.'**
- 2 **Case studies** and assignments will provide the opportunity to **develop skills**, knowledge and understanding.
- 3 Class contact will comprise an integrated mix of lecture, discussion and exercises.  
Lectures will focus on bringing out the central issues and providing students with a range of illustrative situations and models, rather than covering materials found in the readings. You may therefore find it beneficial to 'go over' the week's readings in advance of class when advised to do so.

## Problems

Students wishing to discuss any matters affecting or relating to the course should contact Jim Sheffield.

## Assessment

A student's overall grade in the course will be determined in the following manner:

### 1 Terms Work

#### Assignments

There will be two (2) assignments, each worth a maximum of 25 marks (See 5 below).

Assignment 1: due Monday March 29<sup>th</sup> 2010 - at 5:40pm - Group systems thinking project

[The Assignment 1 group management report will contain 15% group assessment and 10% individual reflections]

Assignment 2: due Mon 24<sup>th</sup> May 2010 - at 5:40pm - Individual decision framing exercise

[Further details of both assignments will be provided in class and on Blackboard]

#### Mandatory Terms Requirements

- comprise:
  - (i) submission of **all** assignments / reports **on the due dates**
  - (ii) obtaining **at least 40%** of the marks available to assignments
  - (iii) participation in one full day equivalent Numeracy Skills Workshop
- Students who fail to satisfy the mandatory requirements [ (i) to (iii) ] 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, whether or not the mandatory course requirements have been satisfied.  
For example, a student who obtains an overall course mark of 35 and does not fulfil one or more of the mandatory course requirements will be given an E grade. A student who fails to sit an examination will have their course mark calculated with an entry of Zero for the exam and their grade determined in the usual way.
- Notice of Failure to meet Mandatory Requirements i) to iii) will be posted on Blackboard or on the Mezzanine Floor Notice-board. Students will be expected to check both places for notification.

### 2 Exam

A Closed Book Test will be conducted in the June **Exam period: 11<sup>th</sup> – 30<sup>th</sup> June (inclusive)**. 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 examination is worth 50% of the total marks available for this course.

- the pass mark for the test will be 40%.

Silent calculators may be used in the exam, but computers are **not** permitted.

### 3 Overall Grade

Your overall grade will be found by combining your terms mark and test/exam mark in a 50:50 ratio.

#### 4 Overall Pass Mark

- will be 50% of the total marks available.

#### 5 Individual & Group Work

While the MBA programme has a tradition of study group collaboration, there are important elements in the assessment process that are strictly individual. You will be expected and encouraged to work in groups on in-term cases and assignment 1. Collaboration on assignment 2 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 assignments.

#### 6 Grading Guidelines

The following broad indicative characterisations of grade will apply in grading:

Excellent Category                      A- (75 – 79%) to A (80 – 84%) to A+ (85% and above):

The learning is demonstrated to a very high level of proficiency, i.e. it is at a standard that makes it exceptional at Master's level.

Very Good Category                      B+ (70 – 74%):

The learning is demonstrated at a high standard. Students have reached a level that clearly exceeds "competency".

Good Category                              B (65 – 69%):

The learning is clearly demonstrated without being exceptional in any way. Students can be thought of as fully competent.

Satisfactory Category                      B- (60 – 64%):

The learning is demonstrated without being exceptional in any way. Students can be thought of as competent.

Marginal Category                        C (50 – 54%) to C+ (55 – 59%):

The learning is demonstrated to a minimally acceptable level. There may be flaws but these are not serious enough to "fail" the student.

Unsatisfactory / Failure Category                      E (0 – 39%) to D (40 – 49%):

The learning is absent or performed to a very low level, or the performance is seriously flawed.

Ungraded Failure                              K

Failure to achieve mandatory course requirements and have achieved at least an average "C" over all the assessment.

#### 7 Handing in assignments

Assignments should be submitted in hard copy form in class, by the due time on the due date. Assignments received after that time will be deemed to be late, and must be handed to the lecturer concerned or to RH Level 10 Reception.

**All Hand-Ins should have:** an Assignment Cover Sheet stating your name, the course name, lecturer's name, assignment name and number, a word count and due date. You should also put page numbers on each page, and use in-text referencing and include a list of references at the end. Preferred referencing style is APA system.

**Students will prepare two copies of each hand-in and keep a second copy for their own reference and for use during the tutorial. Students must also keep an electronic copy of their work.**

Word limits should be adhered to, especially so when they provide a guide to limiting the student's coverage of a topic.

#### 8 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**.  
When calculating the late penalty **Saturdays, Sundays and public holidays will be included** when counting the number of days that an assignment is late.  
**Assignments received more than 7 days after the deadline will not be accepted and the student will automatically fail terms.**
- (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.  
All such applications must be made **before** the deadline and be accompanied by documentary evidence, eg 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 Tutorial 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.

### **Expected Workload**

A total of 150 hours of work is expected from students in this 15-point course. Students can expect the workload to be approximately 10hrs per week including both scheduled contact time and outside class.

### **Communication**

As you will learn from all papers or courses offered by VMS, good communication is crucial to the success of any organisation, programme or course. Communication in this course will be conducted in face-to-face mode in the lectures as well as through the **Blackboard** system.

### **Notices - 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.

Notice of Failure to meet Mandatory Terms Requirements, as specified above in the section on Assessment, will be posted on Blackboard or on the Mezzanine Floor Notice-board. Students will be expected to check both places for notification.

### **Email Contact**

Students wishing to contact staff by email should adhere to the following instructions:

Include the **Course Code**, your **Name**, your **Student ID** and the **Topic** in the subject area of the email, eg

MMBA\_508\_Smith\_Pauline\_3000223344\_Ass1 Query

All students must use their VUW SCS email account and ID. Otherwise, email will be classified as Spam and will be dumped without being read. All emails with attachments will be dumped, unless requested by staff.

Please do not hesitate to raise an issue, as it may be a common student concern. Staff will either respond immediately, or seek clarification and then respond. If concerns remain, then the programme director should be contacted.

## Text

The text for the first part of the course will be:

Maani KE and Cavana RY. *Introduction to Systems Thinking*, Pearson Education, Auckland, 2009.

Supporting texts for all parts of the course include:

Bazerman, M. (2006). *Judgement in Managerial Decision-Making*, New York: Wiley

Dettmer, HW. (1997). *Goldratt's Theory of Constraints - A Systems Approach to Continuous Improvement*, ASQC Quality Press

Ehrenberg, ASC (1982). *A Primer in Data Reduction*, London: Wiley

Eiser, JR & Van der Pligt, R (1988). *Attitudes & Decisions*, London: Routledge

Goldratt, EM. (1994). *It's Not Luck*, Great Barrington: North River Press

Goldratt, E & Cox, J (1992). *The Goal*, 2nd Ed, Croton-on-Hudson: North River Press

*Harvard Business School Press on Making Smarter Decisions* (2007)

Hicks, MJ (1991). *Problem Solving in Business & Management*, London: Chapman-Hall

Maani, K.E. and Cavana, R.Y. (2007). *Systems Thinking, System Dynamics: Managing Change and Complexity*. 2nd ed. Pearson Education NZ (Prentice Hall), Auckland.

Nutt, PC. (2002). *Why Decisions Fail - Avoiding the blunders and traps that lead to debacles*, San Francisco: Berrett-Koehler Publishers.

Russo, JE & Schoemaker, PJH. (2002). *Winning Decisions*, New York: Fireside

Russo, JE & Schoemaker, PJH. (1992). *Confident Decision Making*, London: Piatkus

Russo, JE & Schoemaker, PJH. (1989). *Decision Traps*, New York: Fireside

Targett, D. (1996). *Analytical Decision Making*, London: Pitman

Targett, D. (1984). *Coping with Numbers*, London: Martin Robertson

## Readings

Readings listed in the course schedule will be distributed in class, and students are expected to read these as indicated on the course schedule. Further resources are available in the VUW Commerce Library.

## Materials and Equipment

Readings, cases and other materials will be made available, as and when necessary.

There will be no need for students to use computers during the final course examination. Silent non-programmable electronic calculators may be used in the final examination.

## 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>).

## Communication of Additional Information - Blackboard

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.

## 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 subject to checking by Turnitin, in addition to electronic assignment / project submissions. Turnitin will retain a copy of submitted materials 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.

**For the following important information follow the links provided:**

**Academic Integrity and Plagiarism**

<http://www.victoria.ac.nz/home/study/plagiarism.aspx>

**General University Policies and Statutes**

<http://www.victoria.ac.nz/home/about/policy>

**AVC (Academic) Website: information including: Conduct, Academic Grievances, Students with Impairments, Student Support**

[http://www.victoria.ac.nz/home/about\\_victoria/avcacademic/Publications.aspx](http://www.victoria.ac.nz/home/about_victoria/avcacademic/Publications.aspx)

**Faculty of Commerce and Administration Offices**

<http://www.victoria.ac.nz/fca/studenthelp/>

**Manaaki Pihipihinga Programme**

[http://www.victoria.ac.nz/st\\_services/mentoring/](http://www.victoria.ac.nz/st_services/mentoring/)





Victoria Management School

**MMBA 508 PROBLEM SOLVING & DECISION MAKING**

Trimester 1 2010

**Assignment Cover Sheet**

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ASSIGNMENT NO. 1

TOPIC: GROUP SYSTEMS THINKING PROJECT

Due at beginning of class Monday 29<sup>th</sup> March 2010

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

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

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

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

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

Course Lecturer: \_\_\_\_\_



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**Assignment Cover Sheet**

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ASSIGNMENT NO. \_\_\_\_

TOPIC: INDIVIDUAL DECISION FRAMING EXERCISE

Due at beginning of class Monday 24<sup>th</sup> May 2010

Name: \_\_\_\_\_

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

Course Lecturer: \_\_\_\_\_