

Victoria Management School

## MGMT 316 DECISION MODELLING FOR MANAGERS

Trimester Two 2011

### COURSE OUTLINE

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#### CONTACT DETAILS

##### COURSE COORDINATOR

**Professor John Davies**

Room: RH 920, Rutherford House  
Phone: 463 5382  
Email: [John.Davies@vuw.ac.nz](mailto:John.Davies@vuw.ac.nz)  
Website: [www.vuw.ac.nz/vms](http://www.vuw.ac.nz/vms)

##### PROGRAMME MANAGER

**Garry Tansley**

Room: EA118 (Monday & Friday)  
Room: RH 915 (Wednesday & Thursday)  
Phone: 463-6968  
Email: [Garry.Tansley@vuw.ac.nz](mailto:Garry.Tansley@vuw.ac.nz)

##### ADMINISTRATOR

**Luisa Acheson**

Room: RH 1022, 10<sup>th</sup> floor reception  
  
Phone: 463 5381  
Email: [Luisa.Acheson@vuw.ac.nz](mailto:Luisa.Acheson@vuw.ac.nz)

##### Trimester Dates

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

##### 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 THREE (3) hour closed book examination for this course will be scheduled at some time during the period from: Friday 21 October – Saturday 12 November.

##### Withdrawal from Course

1. Your fees will be refunded if you withdraw from this course on or before 22 July 2011.
2. The standard last date for withdrawal from this course is Friday 23 September. 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 Commerce Faculty's Student Customer Service Desks at Kelburn (EA121) and Pipitea (Ground floor Rutherford House).

##### Class Times

Room: RH LT3  
Day: Mondays **AND** Tuesdays  
Time: 10.30 – 11.20

##### Tutorial / Cybercommons: TWO hours

RWW 222 / RWW 202  
Wednesdays  
08.30 – 09.20 / 09.30 – 10.20

Tutorial signup is through the online programme 'S-Cube'. In the event of a clash, contact Garry Tansley.
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## Tutorial & Workshops:

Combined Tutorial and Workshop sessions will be held on a Wednesday or on the Pipitea campus in the Railway Station tutorial rooms (RWW) and computer labs (RWW) from Week 3 to 5, and Week 8 to 11 [7 combined sessions in total]. Students are expected to attend the Tutorial and the Workshop immediately following, ie either T1 **and** W1:

T1 Tutorial	on	Wednesday	... between	08:30-09:20	RWW 222
W1 Computer workshop	on	Wednesday	... between	09:30-10:20	RWW 202

### Tutorial Signup

Tutorial signup is done through the online programme 'S-Cube'.  
You should have been notified by email about how to sign-up to a tutorial using this system.  
Go to the signup website at: <https://signups.vuw.ac.nz> and enter your SCS username and password, to log into the system. Click on MGMT 316 and follow the instructions.  
If you have been unable to sign up by the end of the first week, please contact the Programme Manager.

## Introduction

Welcome to this offering of Decision Modelling for Managers. Decision-making is one of the main activities in which managers engage. This course studies some important types of problems for which managers need to make decisions, and presents some ways of structuring these decisions in order to provide a systematic, reasoned analysis of the situation, leading to better decisions. Such decision models will be used as decision aids, rather than as answers in themselves, to enable managers to make better decisions.

The course continues the study of formalised methods used in previous courses on managerial decision-making and problem solving. The focus is on the development, use and integration of decision models to aid managerial decision-making. Throughout the decision making process, and throughout the course, the emphasis is on taking a managerial view of the situation, and considering all important aspects, exercising both good judgement and sound analysis.

As such, the course will, like earlier courses MGMT 101 and 206, adopt a multiple perspective approach to the framing and solution of managerial problems, and will provide students with an introduction to a range of relevant concepts and frameworks that will allow for the development of a better understanding of problem solving and decision-making processes. Consequently, the course will offer insights about typical decision making behaviour and how that behaviour can be improved through an empathy with the importance of modelling. In particular, the course will challenge students to think systemically and systematically about issues that confront managers when engaged in a variety of planning activities – for example, forecasting and managing resources in a multiplicity of situations.

## Overall Course Objectives

The course has several objectives, which include:

- exploring different means of structuring problems and decision situations using established formal methods and 'softer' informal approaches
- understanding the variety of ways in which decisions are and can be made
- improving competence in structuring problems
- exploring ways of approaching a range of typical managerial problems and tasks ...  
... in different functional areas of management, at strategic and operational levels
- developing an ability to devise robust strategies and make balanced decisions
- comprehending the complex interaction of systemic forces acting on organisations
- developing familiarity with typical decision trade-offs and evaluation techniques for problem situations
- further developing students' skills in the use of computers in decision making
- further developing analytical skills in data handling and interpretation

In particular, MGMT 316 will adopt a spreadsheet modelling approach to examining these matters.

## Programme and Course-related Learning Objectives

This course will provide students opportunity:

- to develop oral, written and IT-related communication skills
  - through active participation in tutorial and class discussion
  - through the development and presentation of oral and written reports, using narrative, rhetoric and diagrammatic and other schema as forms of presentation
  - through formal and informal classroom debate
- to develop critical and creative thinking skills
  - through exercises and assignments requiring analysis, evaluation, interpretation and synthesis
  - through debate and classroom discussion
- to develop leadership skills
  - through structuring independent study
  - through leading a tutorial, project or group exercise
  - through fulfilling spokesperson duties, reporting on a group's activities or ideas to a class
- to develop computer based analytical skills
  - through exercises and assignments requiring the use of Excel spreadsheet modelling
  - through participating in computer workshop activities
  - through developing data analysis and management skills in take home assignment projects, and preparation for tutorials and workshops.

## Course-related Student Learning Objectives

Objective	By the end of this course, students should be able to:	Addressed via
CLO 1	Interpret major frameworks, approaches, concepts and conceptual vocabulary relevant to decision modelling for managers;	Assignment 1 & 2, Tutorials and Exam
CLO2	Critically analyse different frameworks and modelling approaches and use them to enhance decision making capabilities;	Assignment 1 & 2, Tutorials and Exam
CLO 3	Identify key elements of managerial decision situations, and develop robust solutions through decision modelling;	Assignment 1 & 2, Lectures, Tutorials and Exam
CLO 4a	Recognise and demonstrate the importance of ... critical analysis and critical assessment of decision models and the outcomes of decision modelling;	Assignments 1 & 2, Lectures, Tutorials and Exam
CLO 4b	Recognise and demonstrate the importance of ... leadership ... in setting managerial problem solving objectives and decision criteria as a basis for decision and policy modelling;	Lectures, Tutorials
CLO 4c	Demonstrate an ability to communicate clearly in written, diagrammatic and oral form ... a critical assessment of decision models and the outcomes of decision modelling;	Assignments 1 & 2, Tutorials and Exam
CLO 5	Recognise ethical and social responsibility issues related to decision and policy modelling.	Lectures, Tutorials and Exam

## Use of Assessed Work for Quality Assurance Purposes

Please note that 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 audit purposes. The findings may be used to inform changes aimed at improving the quality of FCA programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

## Course Delivery

The course consists of two one hour lectures per week, one tutorial per week and one computer workshop per week. Lectures are run over all 12 weeks of the course, and tutorials/workshops are run over eight weeks of the course. There is an expectation that students will attend all lectures and tutorials offered. Lectures will start in week one of the course and tutorials in week two of the course.

### **Expected Workload**

A total of 150 hours of work is expected from students in this course. That consists of 24 hours of classes, sixteen hours of tutorials/workshops, seven hours per week outside classes during teaching weeks spent reading, studying, preparing for tutorials and writing assignments, and a further 26 hours revising during mid-trimester break and study week.

### **Individual & 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 assignments set for individuals is not allowed beyond general discussion as to how one might interpret the nature of the assignment question. For such individual assignments, please do not work together to formulate a response and do not loan out your completed assignments.

However, you will be expected and encouraged to work in groups on in-term cases and workshop exercises; but any hand-ins must be individual submissions.

### **Materials and Equipment**

Students will not be allowed to use electronic devices such as computers or electronic calculators in examinations. There will be no need for students to use computers during the final examination.

### **Problems**

Students wishing to discuss any matters affecting or relating to the course should contact their tutor first. Students should feel free to contact the course coordinator at any time.

On matters of grievance or appeal, issues should be taken up the course coordinator in the first instance, and then, with the Head of the Victoria Management School, if dissatisfaction persists.

### **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**

As you will learn from MGMT papers, good communication is crucial to the success of any organisation, especially classes. Communication in this course will be conducted in face-to-face mode in the lectures, workshops and tutorials as well in on-line mode through the **Blackboard** system.

With respect to individual student questions and concerns, given the large number of students involved in this course, it would be greatly appreciated if students could observe the following etiquette. Individual questions and concerns can be addressed in tutorial sessions or by contacting your tutor. Please do not hesitate to raise an issue, as it may be a common student concern. Tutors will either respond immediately, or seek clarification and then respond. If concerns remain, then the course co-ordinator should be contacted.

### **Communication of Additional Information**

Additional course information will be conveyed to students via BlackBoard (BB) and through lectures and tutorials so please check BB often and go to all tutorials and lectures.

### **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  
MGMT316\_Brown\_Tim\_3000223344\_Ass1 Query

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

### **Office Hours**

Please communicate with the Administrator, Luisa Acheson to make an appointment with the course co-ordinator.

## Assessment Requirements

Assignment	Title	Weight	Due Date
1	Decision Analysis Case	20	9 September 2011
2	Business Forecasting Case	20	7 October 2011
3	Tutorial & Workshop Activities Participation	10	Weeks 2 to 5 and 8 to 11.
4	Final Examination	50	21 Oct to 12 Nov 2011
	<b>TOTAL</b>	<b>100</b>	

### 1 & 2 – Case Study Assignments 1 & 2

**up to 40 Marks**

There will be **two (2) assignments worth 20 marks.**

Assignment 1: due Friday, 9 September 2011 by 4.30pm - Decision Analysis Case (20 marks)

Assignment 2: due Friday, 7 October 2011 by 4.30pm - Business Forecasting Case (20 marks)

Students will prepare two copies of each assignment, keeping the second copy for their own reference and for use during the course. Students must also keep an electronic copy of their assignment.

You may discuss in general how one might respond to the nature of the assignment questions with other students; but **reports must be your own work.** These assignments must be written as management reports, with a maximum of 2,500 words not including appendices.

### 3 Tutorial & Workshop Contributions

**up to 10 Marks**

The grade will depend on the student's preparation for, and quality of the contribution to, tutorial and workshop activities and discussions. Students should prepare in advance of the tutorial, as indicated by the lecturer, and should be prepared to discuss the issues and activities with the rest of the tutorial/workshop group in a supportive, positive manner.

The assessment of participation will be based on the following criteria:

Participation	Mark range
No or minimal participation	0-2
Demonstrates a limited understanding of the discussion topics	3-4
Initiates ideas and builds on the ideas of others	5-6
Provides insightful observations on organisational behaviour theory and practice	7-8
Provides a significant contribution to the learning of others	9-10

### 4 Examination

**up to 50 Marks**

The **examination** is worth **50% of the total marks available** for this course.

The pass mark for the examination will be 40% of the marks available, ie 20 marks.

An examination brief will be provided at the last class on Tuesday, October 11th 2011.

The final examination will be a **THREE (3) hour closed book**, at which a series of unseen questions must be answered. All material covered on the course will be examinable, and questions will include a mixture of problems to be worked, case-based questions, and essay questions.

Preparation for the Examination contributes to Course Learning Objectives 1, 2, 3a, 3b, 3c & 4.

Calculators may be used in the exam, but computers and communication devices are **not** permitted.

#### Examination Obligations

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 21 October – Saturday 12 November 2011 (inclusive).

### 5 Overall Pass Mark

will be 50% of the total marks available, ie 50 marks.

## Mandatory Course Requirements

To meet Mandatory Course Requirements, students are required to:

- (a) Submit **TWO (2) assignments** in hard copy for marking; **and**
- (b) Submit all assignments within the allowable timeframe **and**  
(see under **General University Policies and Statutes** below)
- (c) Obtain at least 40 per cent (i.e. 20 marks out of 50) of the final examination marks available.

To obtain any tutorial marks you must be in attendance throughout at least **SIX (6)** of the tutorials offered.

Failure to meet mandatory requirements does not prevent a student completing other pieces of assessment, including sitting the final examination.

Attendance at all classes is an implicit expectation of course participation.

## Grading Guidelines

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

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. <b>Note</b> , "K" is a failing grade.

## 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/research/reference/referencingguides.aspx>

## Textbook

There is no recommended text (to be purchased) for the course. However, the following text is highly recommended:

Savage, SL. (2003). *Decision making with Insight*. Belmont, CA: Brooks/Cole Cengage Learning.

Powell SG & Baker KR (2007). *Management Science: The Art of Modeling with Spreadsheets*. 2<sup>nd</sup> ed. Wiley, USA.

Ragsdale, CT. (2001). *Spreadsheet Modelling and Decision Analysis*, Cincinnati: South-Western College Publishing.

The library contains a number of similar textbooks.

## Readings

A selection of readings will be made available to students, either in class, on Blackboard or to be collected from Rutherford House Level 10 Reception as advised, and at times to be notified.

Students are expected to read these as indicated. Further resources are available in the VUW Commerce Library.

## Handing in assignments:

Assignments should be handed in Level 10 Reception, Rutherford House, on the due date. Assignments received after the due time will be deemed to be late.

All completed assignments must have a cover sheet. The cover sheet is provided in Annexe A.

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.

### Late assignments

Late assignments are to be handed to the **Administrator for the course, Luisa Acheson**, in RH 1022, **Level 10 Reception**, or in her absence, to the Level 10 Receptionist on duty, during Reception Desk hours, **9am till 5pm Monday to Friday during term time**. The 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 Administrator's 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). **Saturdays, Sundays and public holidays** will be included when counting the number of days late. 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 **Programme Manager**, 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 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.
- (iv) 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 **Programme Manager** 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 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.

### Policy on Remarking

Every attempt is made to ensure that the marking is consistent across markers and fair to students.

Students may ask for their written work to be remarked. A different marker will do the remarking and provide comments. The original marking sheet is removed to ensure the process is independent. 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. Experience from previous years is that almost all remarks are within 10% and where there is a change in mark, half the assignments go up and half go down. Occasionally there is a significant shift in the mark.

Application for remarks must be made within 5 days after the marks are available. To apply for a remark, complete the request for re-examination of assessed work form (Annex B) 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 up to 5 days for remarks to be completed.

# MGMT 316 Decision Modelling for Managers

## Course Content & Schedule, 2011

Week no.	Week start	Topic	Lecture (Friday)	Tutorial & Comp Lab (Wed / Thurs)	Assignment Due
1	11 Jul	<b>Course Overview</b>	Modelling & the Decision Making process Optimising & Satisficing Judgement & Analysis	-	
2	18 Jul	<b>Decision &amp; Policy Analysis</b> <b>Managing Sets of Risky Sequential Decisions</b>	Making decisions with uncertain or risky outcomes Decision Analysis Payoff Tables	1. Decision Analysis Payoff Tables using Excel	
3	25 Jul		Decision Analysis Decision Trees 'What if' analyses using Excel Data Tables	2. Decision Tree Analysis using Excel	
4	1 Aug		Using Prospect Theory	3. Decision analysis	
5	8 Aug	<b>Managing Variability</b>	Using simple models to aid decisions involving unpredictability, variability and random events	4. Simulation	
6	15 Aug	<b>Planning &amp; Forecasting I</b>	Simple linear regression Hypothesis testing	-	
<b>MID-TERM BREAK</b>					
7	5 Sep	<b>Planning &amp; Forecasting II</b>	Time series analysis Analysing trends & cycles Measuring forecasting accuracy	-	<b>Asst 1 due 4.30pm Friday, 9 Sep</b>
8	12 Sep		Multiple regression Correlation	5. Forecasting	
9	19 Sep	<b>Managing Resources</b>	Optimisation: Understanding Decision Trade-offs & Opportunity Costs Understanding Resource Valuation & Shadow Prices Intuitive & Graphical Approaches Spreadsheet Modelling	6. Resource allocation Spreadsheet Models	
10	26 Sep			7. Resource allocation Spreadsheet Models	
11	3 Oct			8. Resource allocation Spreadsheet Models	<b>Asst 2 due 4.30pm Friday 7 Oct</b>
12	10 Oct	<b>Course Review</b>	Model validation Other decision modelling issues	-	

Readings will be distributed in class.





**Victoria Management School**

**MGMT 316**

**Individual Assignment Cover Sheet**

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

Tutor's Name: \_\_\_\_\_

Tutorial Number: \_\_\_\_\_

Tutorial Day: \_\_\_\_\_

Tutorial Time: \_\_\_\_\_

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: \_\_\_\_\_



**Victoria Management School**

**MGMT 316**

**Request for re-examination of assessed work**

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

*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.*

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

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

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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 \_\_\_\_/\_\_\_\_/\_\_\_\_

Holistically analyse complex and ambiguous organisational situations
Apply a range of strategy frameworks and perspectives
Understanding behaviour in organisations in social context
Demonstrate systems thinking in decision making and operations management

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