

School of Management

MGMT 206 SYSTEMS THINKING AND DECISION MAKING

Trimester One 2014

COURSE OUTLINE

NAMES AND CONTACT DETAILS

COURSE COORDINATOR

Dr Arun Elias

Room: RH928, Rutherford House

Phone: 463 5736

Email: arun.elias@vuw. ac.nz

ACADEMIC STAFF

Professor John Davies

Room: RH1202, Rutherford House

Phone: 463 5382

Email: john.davies@vuw.ac.nz

UNDERGRADUATE PROGRAMME MANAGER ADMINISTRATOR

Garry Tansley Misa Ito

Room: RH915 – (tba) Room: RH1022, 10th floor reception,

Phone: 463 6968 Phone: 463 5397

Email: Garry.Tansley@vuw.ac.nz Email: misa.ito@vuw.ac.nz

Trimester Dates

Teaching Period: Monday 3rd March – Friday 6th June Study Period: Monday 9th June – Thursday 12th June

Examination Period: Friday 13th June – Wednesday 2nd July (inclusive)

Class Times and Room Numbers

Lecture Room: RHLT1 Day: Wednesdays Time: 8.30 – 10.20

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

Withdrawal from Course

- 1. Your fees will be refunded if you withdraw from this course on or before Friday 14th March 2014.
- 2. The standard last date for withdrawal from this course is Friday 16th 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.

Introduction

The course will examine aspects of systems thinking and how they relate to decision making in a managerial context. It will provide an introduction to a range of systems thinking and decision making approaches, and provide an understanding of how everyday situations can be better managed.

The course will 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. The emphasis is on taking a managerial view of the situation, and seeking to find solutions to typical decision problems and how they can be approached differently using systems thinking in such a way that organisational performance as a whole is improved. In particular, the course will challenge students to think critically and systemically about issues that confront managers in the fields of managing change, managing resources, managing operations and services, managing conflict, and in general, managing in situations which unfold over time, and where sustainability of growth, success, resources etc., is an issue.

BCom Programme and Course-related Learning Objectives

Our graduates will:

- 1. demonstrate application of critical and creative thinking skills to practical and theoretical problems
- 2. be effective communicators
- 3. have a global and multicultural perspective
- 4. recognise, support and display leadership
- 5. develop specific knowledge and skills in systems thinking and decision making.

Course Learning Objectives

Objective	By the end of this course, students should be able to:	Addressed via
CLO1	Demonstrate an understanding of relevant systems thinking and problem-solving concepts and frameworks;	Assignment 1 & 2, Tutorials and Exam
CLO2	Apply different systems thinking and problem-solving frameworks to describe and develop an understanding of problematic decision situations in a variety of managerial and organisational contexts;	Assignment 1 & 2, Tutorials and Exam
CLO3	Demonstrate critical and creative thinking skills through selection and use of a range of systems thinking and problem solving frameworks to develop solutions to problematic situations;	Assignment 1 & 2, Lectures, Tutorials and Exam
CLO4	Demonstrate communications skills using both written and diagrammatic representations to convey understanding developed through the use of systems thinking and problemsolving frameworks;	Assignments 1 & 2, Tutorials and Exam
CLO5	Demonstrate an ability to work constructively in groups to develop systems thinking and problem solving skills;	Lectures and Tutorials
CLO 6	Develop an appreciation of issues and concepts relevant to managing in operational contexts.	Assignment 1 & 2, Lectures, Tutorials and Exam

Course Delivery

The course consists of two one hour lectures per week and one tutorial per week. Lectures are run over all 12 weeks of the course and tutorials 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.

Group Work

While this 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 <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

A total of 150 hours of work is expected from students in this course. That consists of 32 hours of classes and tutorials, eight hours per week outside classes during teaching weeks spent reading, studying, preparing for tutorials and writing assignments, and a further 22 hours revising during midtrimester break and exam preparation.

Readings

Recommended course textbooks:

- Maani, K. E., & Cavana, R.Y. (2010). *Introduction to Systems Thinking*. Auckland: Pearson Education (NZ) Ltd. *

This textbook will be available at the Victoria Book Centre. Copies are also available in the Library.

*For students planning to advance onto MGMT 315 'Systems Thinking and Modelling' in 2014, we recommend that, instead of *Introduction to Systems Thinking*, you purchase a copy of:

Maani, K. E., & Cavana, R.Y. (2007). Systems Thinking, Systems Dynamics: Managing Change and Complexity. Auckland: Pearson Education (NZ) Ltd.

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

Additional Readings and References

Also listed in the course schedule will be a selection of Additional Readings (providing further examples, illustrations, cases etc) and References (ie materials that can be referred to as additional sources of work of substance).

These additional materials will also be made available to students via Blackboard.

As stated above, students are expected to familiarise themselves with the set of suggested readings, and where directed, to have prepared topics in advance of classes/tutorials, being ready to discuss the issues which the readings present.

Materials and Equipment

Students will not be allowed to use electronic devices such as computers or electronic calculators in examinations.

Student workbooks will be provided for material starting in Week 6 and Week 10.

Assessment

From Trimester 1, 2014, a revised Assessment Handbook will apply to all VUW courses: see http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.

In particular, there will be a new grade scheme, in which the A+ range will be 90-100% and 50-54% will be a C-.

The assessment for this course comprises two Systems Thinking assignments, the first assignment is an individual assignment, focusing on applying Causal Loop Diagram representations (CLDs) and Systems Archetypes; the second is a group assignment, focusing on applying systems thinking tools to Operations Management.

It also includes the preparation and participation at tutorials, and a final examination.

Each piece of assessment involves a combination of the learning objectives outlined above.

Assessment Requirements

1 Tutorial Preparation and Participation

up to 10 marks

Participation in tutorials is crucial to the learning process on this course. This is essentially a participation mark, not an attendance mark. The grade will depend on the student's preparation for, and then the extent and quality of the contribution to tutorial class exercises and discussions. Students will be expected to provide a one-page summary of their work to their tutor at the start of the tutorial, or bring along their completed workbook when asked to.

To gain any tutorial marks you must attend six (6) of the tutorials offered. The tutorials are held as shown in the schedule (in weeks 2, 3, 4, 6 & 7 before the mid trimester break, and weeks 8, 10 & 11 following the first break).

If you attend five (5) or fewer tutorials, you will receive no marks for tutorial preparation and participation.

You will be assessed on your ability to develop your management competencies through preparation and participation in tutorials. The demonstrated quality of your **written preparation** and participation for six (6) tutorials will guide the outcome of your preparation and participation marks. 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 theory and practice	7-8
Provides a significant contribution to the learning of others	9-10

Tutorial activities contribute to Course Learning Objectives 1, 2, 3, 4, 5, and 6.

2 Term Work: Assignments – Management Reports

There will be two (2) Assignments – Management Reports - totalling up to 40 marks

Assignment 1 (Individual Assignment):

Due Wednesday, 9 April 2014 - at class – Systems Thinking Ass.1 - up to 25 marks

Assignment 2 (Group Assignment):

Due Tuesday, 21 May 2014 - at class - Systems Thinking Ass.2 - up to 15 marks

For Assignments 1 & 2, you will be asked to present a Management Report setting out your description of a problematic situation using systems diagrams and narrative, showing how the systems representation may lead to appropriate intervention.

These assignments require demonstration of insight developed from the use of systems thinking, and the benefits of using a systems approach. Instructions and marking guidelines for Assignments 1 and 2 will be made available on Blackboard.

The Assignments contribute to Course Learning Objectives 1, 2, 3, 4, 5 and 6.

3 Examination up to 50 marks

The exam is worth 50% of the marks available for this course. The exam will be closed book and will be 3 hours in duration. As a mandatory course requirement, students are required to obtain at least 40 per cent (i.e. 20 marks out of 50) of the final examination marks available. Preparation for the Examination contributes to Course Learning Objectives 1, 2, 3, 4 5 and 6.

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 Friday 13 June – Wednesday 2 July 2014.

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 FCom programmes. All material used for such processes will be treated as confidential, and the outcome will not affect your grade for the course.

Mandatory Course Requirements

In addition to obtaining an overall course mark of 50 or better, students must:

- a. Submit Assignment 1 hard copy for marking.
- b. Submit Assignment 2 hard copy for marking.
- c. Submit all assignments within the allowable timeframe (see under **Penalties** and **General University Policies and Statutes** below); and
- d. Obtain at least 40 per cent (i.e. 20 marks out of 50) of the final examination marks available and
- e. To obtain any tutorial marks you must attend at least six (6) of the tuts offered.

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

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

Tutorial Signup

Tutorial signup is done through the online programme; 'S-Cube'.

You should already have been notified by email about how to sign-up to a tutorial using this system. Go to the signup website at: https://signups.victoria.ac.nz and enter your SCS username and password to log into the system. Click on MGMT206 and follow the instructions.

If you have been unable to sign up by the end of the first week of the course please contact the Undergraduate Programme Manager, Garry Tansley.

Handing in assignments:

Assignments should be handed in at the start of class, **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 Annex 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 in at **Level 10 Reception**, during Reception Desk hours, **9am till 5pm Monday to Friday during term time.** The Administrator for the course 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 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

- 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 **Undergraduate 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 **Undergraduate 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.

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.

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.vuw.ac.nz/library/research/reference/referencingguides.aspx).

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 <u>time</u>, <u>date and signature</u> noted on the front cover by the person receiving it.

Allow up to 5 days for remarks to be completed.

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

Any additional information or information on changes will be conveyed to students via Blackboard

Student feedback

Any feedback in MGMT 206 is considered and followed up on.

Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback_display.php

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.

Systems Thinking and Decision Making - Arun Elias and John Davies

Week	Topic	Readings	Tutorials*
1 Starting Wed 5 March Arun Elias	Introduction to Course Introduction to Systems Thinking	Maani & Cavana Chapter 1 & 2	No Tutorial
2 Starting Wed 12 March Arun Elias	Problem Structuring Stakeholder Management: A Systems Approach	Reading A Elias, Cavana and Jackson (2002)	Tutorial 1 Case on Stakeholder Analysis
3 Starting Wed 19 March Arun Elias	Causal Loop Modelling	Maani & Cavana Chapter 3 (pages 1-40) References Sterman (2000) Chapter 5	Tutorial 2 Case on Causal Loop Modelling
4 Starting Wed 26 March Arun Elias	Systems Archetypes	Maani & Cavana Chapter 3 (pages 40-58)	Tutorial 3 Fixes that Fail Shifting the Burden Students' own cases
5 Starting Wed 2 April Arun Elias	Managing Operations: Describing an Operating System	Jacobs & Chase (2011) Chapter 1	Tutorial 4 Case on Describing Op. System
6 Starting Wed 9 April Arun Elias	Analysing an Operating System	Reading B on Blackboard	Tutorial 5 Case on Analysing Op. System
7 Starting Wed 16 April Arun Elias	Improving an Operating System	Reading C on Blackboard	Tutorial 6 Case on Improving Op. System
	Mid Trimester Break		
8 Starting Wed 14 May Arun Elias	Systems Thinking in Action	Maani & Cavana Chapter 7	Tutorial 6 (continued)
9 Starting Wed 21 May John Davies	Managing Projects and Managing via Projects I	TOC-Critical Chain – Project Management Workbook	
10 Starting Wed 28 May John Davies	Managing Projects and Managing via Projects II	TOC-Critical Chain – Project Management Workbook	Tutorial 7
11 Starting Wed 16 April John Davies	Managing Projects and Managing via Projects III Integration of Systems Approaches	TOC-Critical Chain – Project Management Workbook Davies, Howell & Mabin (2009)	Tutorial 8
12 Starting Wed 16 April AE/JD	Course Review	reek 'n' and Mondays & Tuesd	

^{**}Tutorials for week 'n' will be held on Thursdays of week 'n' and Mondays & Tuesdays of the following week



School of Management

MGMT 206

Assignment Cover Sheet

Name(s):	Student ID:			
Tutor's Name:	Tutorial Number:			
Tutorial Day:	Tutorial Time:			
Date Due:	Date Submitted:			
I/We have read and understood the university policy on Academic Integrity and Plagiarism. I declare this assignment is free from plagiarism.				
Signed:				
3				
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:				



School of Management

MGMT 206

Request for re-examination of assessed work

	Assessment affected e.g. Individual Assignment, In-class Test			
Student ID	Name As it appears in your enrolment	Tutorial No/Tutor's name		
Contact Details	Phone			
	Email			
-	on (criteria specified in the mark sheet) you e-examine "all" criteria will not be considere			
	you believe each of these sections should b worth more," is insufficient.	e re-examined:		
In requesting a re-ear OR decrease in the	xamination of my submitted work, I understa mark obtained.	and that the result may be an increase		
Signature	 e	Date		