

VICTORIA MANAGEMENT SCHOOL

**MMBA 549 SYSTEMS THINKING AND CREATIVE  
PROBLEM SOLVING**

Trimester 2 2009

**COURSE OUTLINE**

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**Contact Details**

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**Class Times and Room Numbers**

Mondays 17:40 to 20:30pm  
Dates: 20, 27 July, 10, 17 August, 14, 21, 28 September and 5 October

**Teaching Period:** Monday 13 July to Friday 16 October 2009

**Course Objectives**

One of the most enduring features of contemporary management is that complex organisational problems are rarely straightforward enough to be resolved through the application of any single theory or method, through expert knowledge of any single academic discipline, or through 'common-sense' thinking. Moreover many such problems are comprised of complex interacting elements; as a result they must be 'structured' before they can be managed.

This course is prefaced on the assumption that complexity and ambiguity are inherent features of managing. Decision makers have to accept and confront these things, not hide from them. Against this background the course does the following:

- (a) Examines the nature of creative thinking about organizational problems.
- (b) Considers the roots of systemic thinking in disciplines such as biology, control engineering, and the natural sciences
- (c) Introduces and illustrates several systems methods and tools across three paradigms

- (d) Uses the idea of ‘multimethodology’ to provide a framework for the creative combination of different approaches.

Note: this paper does not use quantitative systems concepts or methods.

### **Workload**

Workload expectations for this course are approximately 150 hours.

### **Assessment Requirements**

Individual Project (50%)

Final Project (50%)

Details about the assessments will be provided during the first lecture.

### **Individual Work**

While the Victoria MBA programme 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.

### **Penalties**

In fairness to other students, work submitted after the deadline will be subject to a penalty of 5% of the total marks available per day of lateness. In the event of unusual, unforeseen circumstances (e.g., serious illness, family bereavement), students should discuss waiver of the penalty with the course controller prior to the deadline date.

### **Lecture Schedule**

#### **Sessions and Topics**

1. **Creative and Systems Thinking in an Organisational Context. Introduction to qualitative modelling of organisations**
2. **Viable Systems Modelling I**
3. **Viable Systems Modelling II**
4. **Soft/Interpretive Systems Thinking. Soft Systems Methodology I**
5. **Soft Systems Methodology II**
6. **Strategic Options Development Analysis / Cognitive Mapping I**
7. **Strategic Options Development and Analysis / Cognitive Mapping II**
8. **Critical Systems Thinking/ Multimethodology**

### **Readings**

Textbook: Michael C. Jackson ‘Systems Thinking: Creative Holism for Managers’ Wiley, London, 2003. Readings, in addition to those listed below, may be provided from time to time.

#### **Session 1:**

M.Jackson (2003) Ch’s 1, 2 and 3 Systems Thinking: Creative Holism for Managers, Wiley, London.

R. L. Ackoff (1994) Systems Thinking and Thinking Systems. *System Dynamics Review* 10, 175 - 188.

H. Mintzberg and L. Van der Heyden (1999) "Organigraphs: Drawing How Companies Really Work." Harvard Business Review Sept 1999.

J. Brocklesby (2009) "Network Structures in the Public Sector: the Organisational Response to the Problem of Transnational Organised Crime". European Group on Organisational Studies, July 2009.

### **Sessions 2 and 3:**

M.Jackson (2003) Organisational Cybernetics, Systems Thinking: Creative Holism for Managers, Wiley, London.

Brocklesby, J. and S. Cummings (1996). "Designing a Viable Organization Structure." International Journal of Strategic Management: Long Range Planning 29(1): 49-57.

Brocklesby, J. and S. Cummings (2003). Strategy As Systems, in Images of Strategy. S. Cummings and D. Wilson. London, Blackwell.

Brocklesby, J. and J. Mingers (2005). "The Use of the Concept Autopoiesis in the Theory of Viable Systems" Systems Research and Behavioral Science 22(1): 3-9

### **Sessions 4 and 5:**

M.C.Jackson (2003). Soft Systems Methodology, in Systems Thinking: Creative Holism for Managers London, John Wiley.

Checkland, P. (2003). Soft Systems Methodology. Rational Analysis for a Problematic World Revisited. J. Rosenhead and J. Mingers. London, John Wiley

Checkland, P. (2003). Soft Systems Methodology in Action: Participative Creation of an Information Strategy for an Acute Hospital. Rational Analysis for a Problematic World Revisited. J. Rosenhead and J. Mingers, London, John Wiley.

Brocklesby, J. (2007). The Theoretical Underpinnings of Soft Systems Methodology – Comparing the Work of Humberto Maturana and Geoffrey Vickers. System Research and Behavioral Science 24(2): 157-168

### **Sessions 6 and 7:**

Eden, C. and Ackermann, F. (2001). SODA – The Principles, Rational Analysis for a Problematic World Revisited. J. Rosenhead and J. Mingers, London, John Wiley & Sons.

Eden, C. and Ackermann, F. (2001). SODA – Journey Making and Mapping in Practice, Rational Analysis for a Problematic World Revisited. J. Rosenhead and J. Mingers, London, John Wiley & Sons.

Eden, C. and Ackermann, F. (2001). SODA – The Principles, Rational Analysis for a Problematic World Revisited. J. Rosenhead and J. Mingers, London, John Wiley & Sons.

J. Bryson, F.Ackermann, C.Eden and C.Finn (2004) What Do I Think? A Guide to Cognitive Mapping. Visible Thinking: Unlocking Causal Mapping For Practical Business Results. John Wiley, London.

### **Session 8:**

M.C.Jackson (2003). Total Systems Intervention, in Systems Thinking: Creative Holism for Managers London, John Wiley.

M.C.Jackson (2003). Critical Systems Practice, in Systems Thinking: Creative Holism for Managers London, John Wiley.

J. Brocklesby (2009) "Ethics Beyond the Model: How Social Dynamics Can Interfere with Ethical Practice in Management Science", OMEGA: International Journal of Management Science, 37(6): 1073-1082.

Mingers, J. and J. Brocklesby (1997). "Multimethodology: Towards A Framework For Mixing Methodologies." Omega - International Journal of Management Science 25(5): 489-509.

## **Victoria MBA Grading Standards are as follows:**

### 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.

## **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.victoria.ac.nz/library/research/reference/referencingguides.aspx>

## **Communication of Additional Information**

Additional information and information on any changes will be conveyed to students via class announcements and in written form on the university blackboard server for MMBA 549.

## **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/academic.aspx>

### **Faculty of Commerce and Administration Offices**

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

### **Manaaki Pihipihinga Programme**

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