



School of Economics and Finance

ECON 314 GAME THEORY

Trimester Two 2014

COURSE OUTLINE

Names and Contact Details

Lecturer- Coordinator- Tutor Jack Robles Tel: (04) 463-7492 Email: jack.robles@vuw.ac.nz

Room: RH 317 Mail Box: RH Mezzanine **Box #88** Office Hours: Tuesday 12:30-2 or by appt.

Class Times and Room Numbers

Lecture Times and Location Wednesday & Friday: 9:30am – 10:20am in GB LT 3

Tutorial Times and Location

Thursdays 10:30 (RWW 314) and 11:30 (RWW 314); Fridays 8:30 -10:20 (RWW 311) There are NO tutorials weeks 1,2, 5, and 8 (Jul 17,18,24,25, Aug 14,15 & Sept 18,19)

Assessment Requirements

The assessment for the course consists of:

Assignment 1	10%	Thursday, August 21
Assignment 2	10%	Thursday, October 16
Test (1 hour)	30%	6:40 PM Wednesday, September 17 (RH LT 2)
Final Exam (2 hour)	50%	Date TBA

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.

Mandatory Course Requirements There are no mandatory course requirements.

If you cannot sit the final, then see <u>www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat</u>

Penalties

Assignments are to be placed in in Mezzanine Floor mail **Box # 88** by 5PM of the due date.

Assignments will not be accepted more than 1 week late, and will have 5% deducted per day (rounded up) late. Late assignments must be dated by an SEF staff member.

Course Content

- 1. Decision Theory
- 2. Extensive Form Games
- 3. Normal Form Games and the 'Bayes Normal Form'
- 4. Common Knowledge and Rationalizability (in the normal form)
- 5. Nash Equilibrium
- 6. Subgame Perfect Nash Equilibrium
- 7. Bargaining
- 8. Repeated Games
- 9. Adverse Selection and Signalling
- 10. Extensive Form Rationalizability
- 11. Extra topics: Reputation, Zero Sum Games, and Cost Sharing.

Readings

Watson, "Strategy; An Introduction to Game Theory" Either the first or second edition is fine.

Communication of Additional Information

Additional information will be announced either in lecture or on blackboard.

Trimester Dates

Teaching Period: Monday 14 July – Friday 17 October Study Period: Monday 20 October – Thursday 23 October Examination Period: Friday 24 October – Saturday 15 November (inclusive) Enrolled students are obliged to attend an examination at the University at any time during the examination period.

Withdrawal from Course

Your fees will be refunded if you withdraw from this course on or before 25 July.

The standard last date for withdrawal from this course is 26 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 Faculty's Student Customer Service Desks.

Course Learning Objectives

By the end of this course, students should be able to:

- 1. apply microeconomic theory at an advanced undergraduate level
- 2. formally describe simple economic settings in game theoretic terms
- 3. identify Nash equilibria in pure and mixed strategies for a range of simple games
- 4. identify a range of types of equilibria, such as subgame perfect Nash equilibria, Bayesian Nash equilibria and perfect Bayesian equilibria, for appropriate games.

Course Delivery

is via lectures and tutorials.

Expected Workload

This is a 15 point course which implies a workload = 150 hours. Hours expected per week = 11.5 (over 13 weeks), or 12.5 (over 12 weeks). This is a guide only and individual students should not feel constrained by it.

ECON314

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.

Prescription

This course introduces and develops game theory and its applications.

Student feedback

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

Link to general information

For general information about course-related matters, go to <u>http://www.victoria.ac.nz/vbs/studenthelp/general-course-information</u>

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-.