TE WHARE WĀNANGA O TE UPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

School of Economics and Finance

ECON 314 GAME THEORY

Trimester Two 2015

COURSE OUTLINE

Names and Contact Details

<u>Lecturer- Coordinator- Tutor</u>

Jack Robles

Tel: (04) 463-7492

Email: jack.robles@vuw.ac.nz

Room: RH 317

Mail Box: RH Mezzanine **Box #88**

Office Hours: Monday 1:30-3 or by appt.

Class Times and Room Numbers

<u>Lecture Times and Location</u>

Monday & Wednesday: 8:30am – 9:20am in GB LT 4

<u>Tutorial Times and Location</u>

Thursdays in RWW312 at 10:30, 11:30 and 2:40

There are NO tutorials weeks 1,2, 5, and 8 (Jul 16, 23, Aug 13 & Sept 17)

Assessment Requirements

The assessment for the course consists of:

Assignment 1	10%	Thursday, August 20
Assignment 2	10%	Thursday, October 15
Test (1 hour)	30%	6:40 PM Thursday, September 17 (GB LT 1)
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 complete an assessment or sit the final, then see
www.victoria.ac.nz/home/study/exams-and-assessments/aegrotat

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 (Ch5)
2. Extensive Form Games (Ch2 and Ch3)
3. Normal Form Games and the 'Bayes Normal Form' (Ch3 and Ch24)
4. Common Knowledge and Rationalizability (in the normal form) (Ch4, Ch6, and Ch7)
5. Nash Equilibrium (Ch9 and Ch11)
6. Subgame Perfect Nash Equilibrium (Ch14 and Ch15)
7. Bargaining (Ch18 (pp 230-236) and Ch 19)
8. Repeated Games (Ch22)
9. Adverse Selection and Signalling (Ch 26, Ch27, Ch28, and Ch29)
10. Extensive Form Rationalizability
11. Extra topics: Reputation (Ch29,) Zero Sum Games (Ch12,) and Cost Sharing.

Readings
Watson, "Strategy; An Introduction to Game Theory" 3rd edition.

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

Trimester Dates
Teaching Period: Monday 13 July – Friday 16 October
Study Period: Monday 29 October – Thursday 22 October
Examination Period: Friday 23 October – Saturday 14 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 24 July.

The standard last date for withdrawal from this course is 25 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 or online.

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.

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
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

Assessment

The Assessment Handbook will apply to all VUW courses: see
http://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf.