Unit Outline*

ECON1111

Quantitative Methods for Business and Economics

Semester 2, 2011
Campus: Crawley

Unit Coordinator
Winthrop Prof Darrel Turkington (Week 1 - 7)
Associate Prof Sam Tang (Week 8 - 13)

Business School
www.business.uwa.edu.au

* This Unit Outline should be read in conjunction with the Business School Unit Outline Supplement available on the Current Students web site http://www.business.uwa.edu.au/students
UNIT OVERVIEW

Introduction
Welcome to Quantitative Methods in Business and Economics – or QM for short! This unit is obligatory for students who have not completed applicable or calculus mathematics, or equivalent, previous to studying at the UWA Business School.

UNIT CONTENT

Fundamentals
Numbers, functions, functions of a single real variable, graph of a function, economic functions.

References
Wisniewski, M., Chapter 2

A linear function of a single variable.
Properties of a linear function and its graph. Application in economics, elasticities.

References
Bradley, T., Chapter 2.
Wisniewski, M., Chapter 3.

Simultaneous linear equations in two variables.
Solving such equations. Applications in microeconomics and macroeconomics.

References
Bradley, T., 3.1, 3.2, 3.3.
Wisniewski, M., Chapter 3

Non-linear functions and equations
Non-linear functions commonly used in economics and business studies will be introduced. These include polynomial functions, exponential functions and logarithmic functions. Quadratic equations will be solved.

References
Bradley, T., Chapter 4.
Wisniewski, M., 6.1,6.2.

Differentiation and applications
The derivative, rules of differentiation, second-order derivatives, rates of change, slopes, elasticities, marginal functions, curvature of functions, points of inflexion, optimisation of a function of a single variable, economic examples.

References
Bradley, T., Chapter 6
Wisniewski, M., 6.3, 6.4, 6.5, 6.6, Chapter 7, 8.
Integration
Areas under a curve, definite integral, integration as anti-differentiation.

References
Bradley, T., Chapter 8.
Wisniewski, M., Chapter 13.

Multivariate calculus

Simultaneous equations with 3 variables

Financial mathematics

Preparatory statistics
Descriptive statistics – central tendency and dispersion.

TEACHING AND LEARNING RESPONSIBILITIES

Teaching and learning evaluation
You will be asked to complete three evaluations during this unit. The Student Perception of Teaching (SPOT) survey will be conducted twice – once before the mid-semester break and once before the end of semester. The SPOT survey is conducted in class, and asks students to provide feedback on the unit in general, the lecturers and the tutors. The Student’s Unit Reflective Feedback (SURF) survey is completed online and is a university wide survey and deals only with the unit. You will receive an email from the SURF office inviting you to complete the SURF when it is activated. We encourage you to complete the forms as your feedback is extremely important and can be used to make changes to the unit or lecturing style when appropriate.

Your responses to these surveys matter perhaps more than you think. They provide very important insights into how units are received by student, and we (the staff) take this information very seriously. Besides using this information to help us improve the units we teach, we also use your responses when documenting our achievements in teaching and learning, which we need to do regularly.

Many of the changes that have been made to this unit result directly from student feedback via the SPOT surveys. For example, students have provided positive feedback on the use of examples and exercises in the lectures, and on the WebCT resources. Hence, these features have been kept and improved further. Constructive criticisms have also been received and changes made accordingly. For example, in previous years we began tutorials in week 3 of semester. Some students told us that it would be good to start one week earlier. As a result, we introduced tutorials in week 2. These are just some examples. The point is that student feedback matters! We do listen, we do value your feedback, and we do try to improve the unit in response to student feedback.
Attendance

Participation in class, whether it be listening to a lecture or getting involved in other activities, is an important part of the learning process. It is therefore important that you attend classes. More formally, the University regulations state that ‘to complete a course or unit students shall attend prescribed classes, lectures, seminars and tutorials’.

CONTACT DETAILS

We strongly advise students to regularly access their student email accounts. Important information regarding units may be communicated by email and will not be automatically forwarded to private email addresses. In this unit, important information will chiefly be posted on WebCT, so it is important that you check the WebCT page regularly.

<table>
<thead>
<tr>
<th>Unit coordinator/lecturer</th>
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<tbody>
<tr>
<td>Name:</td>
<td>Darrell Turkington</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:darrell.turkington@uwa.edu.au">darrell.turkington@uwa.edu.au</a></td>
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<tr>
<td>Phone:</td>
<td>6488 2880</td>
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</tbody>
</table>
| Consultation hours:       | Wednesday 11:00am – 1:00pm  
                          | Friday 11:00am – 1:00pm   |
| Room:                     | Room 113 1st Floor, UWA Business School |
| Name:                     | Sam Tang               |
| Email:                    | sam.tang@uwa.edu.au    |
| Phone:                    | 6488 2931              |
| Consultation hours:       | Tuesday 2:00-4:00pm    |
| Room:                     | Room 116, 1st Floor, UWA Business School |
| Lecture times:            | Please check: http://www.timetable.uwa.edu.au |
| Lecture venue:            | Please check: http://www.timetable.uwa.edu.au |
| Tutorial times:           | http://www.olcr.uwa.edu.au/  |
| Tutorial venue:           | http://www.olcr.uwa.edu.au/  |
TEXTBOOK(S) AND RESOURCES

Unit website
http://www.webct.uwa.edu.au

Recommended/required text(s)

Other useful references

UNIT STRUCTURE

This unit is taught in two parts. The first part is taught by Professor Darrell Turkington, while the second part is taught by Associate Pro Sam Tang.

ASSESSMENT MECHANISM

The purpose of assessment
There are a number of reasons for having assessable tasks as part of an academic program. The assessable tasks are designed to encourage you to explore and understand the subject more fully. The fact that we grade your work provides you an indication of how much you have achieved. Providing feedback on your work also serves as part of the learning process.

Assessment mechanism summary

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<tr>
<th>Item</th>
<th>Weight</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Weekly assignments</td>
<td>30%</td>
<td>Due Weekly</td>
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<tr>
<td>Mid-semester exam</td>
<td>20%</td>
<td>1 Hour</td>
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<tr>
<td>Final exam</td>
<td>50%</td>
<td>2 Hours (Should get 35% or higher to pass the unit).</td>
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Exams
An approved deferred exam applicants for mid-term will have reweighting of assessment. To pass the unit you should get 35% or higher in the final exam regardless of your performance in other assessment factors.

Approved calculators for examinations
The university only permits the use of calculators in examinations when the calculator has an approved sticker. If the student does not have an approved sticker on their calculator, they will not be permitted to use the calculator. Since this is a University wide policy, it is not possible for unit coordinators to grant on the spot exemptions. Calculators can be approved at the Business School.
Tutorials
The two hour tutorial sessions serve three purposes. First in them the tutor will attempt to deal with the problems students are having in the course. Secondly, mistakes students are making in weekly assignments will be covered. Finally the tutorials act as a workshop where students collectively work through further problems that are designed to highlight the major concepts covered in the lectures. Attendance is compulsory. **Students must attend at least 8 out of the 11 tutorials to have their assignment marks allocated towards their final grade.** If less than 8 tutorials are attended, the assignment/tutorial attendance mark will be 0%.

Submission of assignments
Submit your assignment in hard copy to the Business School Students Centre. Please remember to attach an Assignment Cover sheet to the front of your assignment. You can download the relevant Assignment Cover sheet from the Business School Current Students web page http://www.business.uwa.edu.au/students/assessments.

Student Guild
Phone: (+61 8) 6488 2295
Facsimile: (+61 8) 6488 1041
E-mail: enquiries@guild.uwa.edu.au
Website: http://www.guild.uwa.edu.au

Charter of Student Rights and Responsibilities

Appeals against academic assessment
The University provides the opportunity for students to lodge an appeal against assessment results and/or progress status (refer http://www.secretariat.uwa.edu.au/home/policies/appeals).