MACQUARIE UNIVERSITY

FACULTY OF BUSINESS AND ECONOMICS

Unit Code: BBA315
Business Forecasting

Semester 1, 2010

Department of Business

Year and Semester: Semester 1, 2010

Unit convenor: Con Korkofingas

Prerequisites / Corequisites: Admission to BBA or BCom-Mktg or BIntBus; STAT170 or STAT171; 36 cp

Students in this unit should read this unit outline carefully at the start of semester. It contains important information about the unit. If anything in it is unclear, please consult one of the teaching staff in the unit.

ABOUT THIS UNIT

As much as businesses are involved in activities in the present, they are also involved in planning for the future. The planning process requires strategic input from managers, budgeting, evaluation of the business's current position, evaluation of the environment both internal and external, and prediction of future circumstances that will impact on the business. Forecasting is an important component of the planning process. Prediction of key variables such as sales and/or market share, external variables such as input prices, interest rates, exchange rates and economic activity are incorporated with strategic input to develop forecasts for key performance indicators of the business. These forecasts are used both as a direction for the business and benchmarks against which actual performance can be compared.

This unit explores business forecasting by considering the planning process of the organisation, the environment in which business forecasts are made, prediction of key variables using qualitative and quantitative information and the practical considerations of forecast implementation. Quantitative predictions will generally make use of spreadsheets and simple statistical procedures that can be easily applied in the business environment.

TEACHING STAFF

Convenor: Con Korkofingas   **Room:** E4A-629

Email: ckorkof@efs.mq.edu.au

Consultation: To be advised in week 2 of semester (notice on the BBA315 website)

I am also contactable via the mail facility or discussion board on the BBA315 website

Classes in BBA315 consist of 3 hours face-to-face per week. This consists of 2 hours lecture per week and 1 hour tutorial per week.

The timetable for classes can be found on the University web site at: http://www.timetables.mq.edu.au/

REQUIRED AND RECOMMENDED TEXTS AND/OR MATERIALS

There is **no prescribed text** for this unit.

Recommended Reading

Wilson J.H., Keating B., *Business Forecasting*, Irwin (5th edition)

Hanke, John E & Wichern, Dean W, *Business Forecasting*, (International Edition) Prentice Hall, (8th Edition)

Useful Resources

A useful website with resources for practitioners and researchers in forecasting including relevant links is;

http://www.forecastingprinciples.com

UNIT WEB PAGE

All announcements and resources (including lecture slides) will be available on the BBA315 Blackboard site. The general online website is http://learn.mq.edu.au. After login students enrolled in BBA315 for this semester should have access to the BBA315 Blackboard site.

LEARNING OBJECTIVES AND OUTCOMES

The learning outcomes of this unit are:

- an understanding of the need for, and uses of, forecasting in business
- an understanding of simple quantitative forecasting techniques application of simple forecasting techniques using EXCEL and simple statistical programs
- an understanding of qualitative forecasting techniques in a business environment.

In addition to the discipline-based learning objectives, all academic programs at Macquarie seek to develop students' generic skills in a range of areas. Students should develop skills in the following:

- Working in teams
- Taking responsibility for the students own learning
- Critical analysis skills;
- Creative thinking skills.

TEACHING AND LEARNING STRATEGY

This unit is taught using lectures and tutorials. Students are expected to read in advance of lectures, and participate in tutorials. Students will also be expected to work individually and/or in small groups to complete assessment tasks. In addition to learning forecasting techniques and applications students are expected to follow current business and economic developments relating to forecasting.

Lecture Program: 2010

Week	Date	Topics Covered	Other Information
1	22 February	• Outline the forthcoming series of lectures and advise the basis on which students will be judged. • The meaning of forecasting. The philosophy of forecasting. • Organisations, planning and budgeting.	
2	1 March	• Evaluation of forecasting tasks. • Definition of time series. • Sources of data for prediction. • Analysing components of Time Series. • Stationarity	
3	8 March	• Errors of prediction. • Costs of errors • Simple predictor models • Naïve, MA, SES	**Tutorial 1 - Introduction to the Data Environment**

4	15 March	- ARSSES model - Prediction of trends - Holts smoothing model - Trend extrapolation.	**Tutorial 2 - Elementary smoothing**
5	22 March	- Seasonal models - Deseasonalising data - Decomposition - Winters Smoothing Model	**Tutorial 3 – Trend Models** ==**Assignment 1 due in Tutorials**==
6	29 March	- Introduction to Regression models. - Ways to Evaluate Models - Diagnosing Regression Models	**Tutorial 4 –Seasonality**
		RECESS	
7	19 April	Dummy Variables, Trends in Regression Autoregressions	==**Within Semester Test 1 in Tutorials (covers weeks 1-5 inclusive)**==
8	26 April	==**NO LECTURE - April 26th is a public holiday**==	==**No tutorials this week**==
9	3 May	- Regression Modelling in Practice - Nesting	**Tutorial 5- Regression I**
10	10 May	- Leading Indicators - Cycles - Anticipatory Surveys	**Tutorial 6 – Regression II**
11	17 May	- Judgmental methods - Subjective probability assessments. - The role of judgmental prediction in the organisation	**Tutorial 7 - Leading Indicators** ==**Assignment 2 Due in BESS**==
12	24 May	- Scenario development methods - DELPHI approaches - Combining Forecasts - Analogy methods	==**Within Semester Test 2 in Tutorials (covers weeks 6 - 10 inclusive)**==
13	31 May	Using all the information to	

		forecast.	
		• Putting it all together.	
		• Forecasting in practice.	
		• The future of forecasting	

RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES

There are a number of assessment tasks in BBA315 that seek to enhance student learning of concepts and meet unit learning outcomes. The assessment tasks include testing of knowledge of forecasting concepts, methods and applications, applications of simple forecasting techniques to produce forecasts and application of learnt concepts to real and/or simulated forecasting scenarios.

Assessment

Raw marks in this unit will be allocated on the following basis

Assignments	**30 %**
Within Semester tests	**20 %**
Final Examination	**50%**

Assignments

There will be **two** assignments in this unit.

Assignment 1: The first assignment will be a short **individual** assignment due in **your tutorial** in Week 5 (week commencing Monday 22 March). This assignment is designed to assess your learning of simple forecasting techniques and provide you with an indication of your progress towards unit learning outcomes. Assignments handed in at later tutorials on the day due will be penalized 20% of the potential marks for the assignment. For every further day late a further 20% penalty will apply for each day late.

This assignment will be worth 10% of the raw mark in this unit.

Working together on computing can be beneficial, however students should ensure that all work reported in the individual assignment relating to answers and conclusions is their own. There will be heavy penalties for plagiarism (zero marks for this assessment component at a minimum). If you reference material from other sources these must be acknowledged formally in the bibliography attached to your assignments. This does not include BBA 315 course materials.

The assignment will be placed on the BBA315 website in the first week of the semester.

(Note: Students will NOT be judged on the quantity of computer output nor strictly on the correctness of answers. The logic and justification of your answers with evidence will be of paramount importance. Presentation of answers and output will also be highly regarded).

<u>Assignment 2:</u> The second assignment will be a longer group/individual assignment due by <u>**7pm Wednesday 19th May**</u> in <u>**BESS**</u>. The assignment can be done in groups of **no more** than 5 or can be done individually. The number of people in the group will not be a consideration for the awarding of marks in the assignment. In the case of group response all members of the group will be awarded the same mark unless there is a peer review statement signed by all members of the group indicating otherwise. <u>Late assignments will attract a 20% penalty for each day late. All members of the group will receive the same raw mark unless an included peer review statement indicates otherwise.</u>

This assignment will be worth <u>20%</u> of the raw mark in this unit.

The assignment will be placed on the BBA315 website in the first few weeks of the semester.

(Note: Students will NOT be judged on the quantity of computer output nor strictly on the correctness of answers. The logic and justification of your answers with evidence will be of paramount importance. Presentation of answers and output will also be regarded. Your or your group response to Assignment 2 must be written as a management style report which includes executive summary, introduction, body of report, limitations and conclusions and recommendations.

There will be heavy penalties for plagiarism (zero marks for this assessment component at a minimum).

If you reference material from other sources these must be acknowledged formally in the bibliography attached to your assignments. This does not include BBA 315 course materials.

Within-semester tests

There will be two within-semester tests to be held in tutorials on Monday 19th or Wednesday 21st April **and** Monday 24th or Wednesday 26th May in your tutorial time. **<u>Students must attend the tutorial time to which they have been allocated at enrolment. Failure to do so without prior permission may result in loss of marks for the test.</u>** The first test (Monday 19th or Wednesday 21st April) will cover all material from weeks 1-5 inclusive and will consist of multiple choice questions. The second test (Monday 24th or Wednesday 26th May) will cover all material from weeks 6 -10 inclusive and will consist of multiple choice questions. **<u>There is no provision for supplementary examinations for the within-semester tests.</u>**

Final Examination

A 3 hour final examination for this unit will be held during the University Examination period.

The University Examination period in First / Second Half Year 2010 is from 09-06-10 to 25-06-10.

You are expected to present yourself for examination at the time and place designated in the University Examination Timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations. http://www.timetables.mq.edu.au/exam

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for Special Consideration. Information about unavoidable disruption and the special consideration process is available at:
http://www.reg.mq.edu.au/Forms/APSCon.pdf

If a Supplementary Examination is granted as a result of the Special Consideration process the examination will be scheduled after the conclusion of the official examination period. (Individual Faculties may wish to signal when the Faculties' Supplementary Exams are normally scheduled.)

You are advised that it is Macquarie University policy not to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, which is the final day of the official examination period.

The final examination may consist of multiple choice and/or short answer questions. **All material in the unit is examinable**. Further details about the final examination will be given later in the semester.

__You must perform satisfactorily the final exam as well as satisfactorily in overall assessment to pass the unit__ In the examination components of the unit, most complex formulae will be provided however students will be expected to memorise simpler formulae. Statistical tables will be provided. All examinations are closed book. Students will also be required to perform calculations requiring a calculator so they should bring one to all examinations.

Assessment Grading and Final Grades

To assist students to interpret the meaning of the raw mark on assignments the following information is provided:

Range of Marks   (max 10)

0 - 4	Work is below the required standard. A major effort should be made to improve the quality of the work.
4.5	A marginal effort, has important weaknesses which require further attention.
4.5 – 6.5	A sound level of work with no major shortcomings. Meets the expected level of work at this unit level.
7 -8	Displays academic excellence in some areas, but with limitations in scope and ability to sustain a position.
8.5-10	Work is among the highest quality produced by students at the level of this unit.

Final Grades:

The final mark and grade awarded to students will be assessed on the following criteria:

HD.	Denotes performance which meets all unit objectives in such an exceptional way and with such marked excellence that it deserves the highest level of recognition.
D.	Denotes performance which clearly deserves a very high level of recognition as an excellent achievement in the subject.
CR.	Denotes performance which is substantially better than would normally be expected of competent students in the unit.
P.	Denotes performance which satisfies unit objectives.
PC.	Denotes performance which meets unit objectives only marginally, and which is therefore unlikely to be adequate preparation for further study in the area.
F.	Denotes performance which does not meet unit objectives.

The raw mark will not necessarily be exactly the same as the final mark awarded. Raw marks may be scaled according to normal statistical procedures.

* Note that the total raw mark a student has achieved will not necessarily be indicative of the grade the student obtains. At the final tabulation stage, consideration will be given to individual student performance in all aspects of assessment but

especially in the examination components and the above criteria for a grade will apply. Student raw marks may then be adjusted to reflect the grade awarded

All students are required to perform satisfactorily in the final examination to obtain a passing grade for the unit. The combined performance of the student in the examination components of the course will be a prime determinant of the student's final grade in this unit. **In the case that a student has not achieved a satisfactory performance in the examination components, the final mark awarded will be indicative of that examination performance i.e. marks in other assessment tasks will be weighted differently in the final mark**.

PLAGIARISM

The University defines plagiarism in its rules: "Plagiarism involves using the work of another person and presenting it as one's own." Plagiarism is a serious breach of the University's rules and carries significant penalties. You must read the University's practices and procedures on plagiarism. These can be found in the *Handbook of Undergraduate Studies* or on the web at: http://www.student.mq.edu.au/plagiarism/

The policies and procedures explain what plagiarism is, how to avoid it, the procedures that will be taken in cases of suspected plagiarism, and the penalties if you are found guilty. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at http://www.student.mq.edu.au