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The lecturer-in-charge is Louis YEUNG (Room 103, John Goodsell Building; Tel.9385 3286; Email: L.Yeung@unsw.edu.au). Louis Yeung is also the subject co-ordinator (tutor-in-charge) of the course. He is therefore responsible for all academic and administrative matters regarding the course. Students should feel free to approach him for any problem concerning the course. A list of all lecturers, tutors and lab tutors as well as consultation hours of all teaching staff will be posted on the QMA course website. Other information of an administrative nature may also be obtained from the School of Economics Office, 2nd Floor, room 223, John Goodsell Building and/or the Faculty Student Centre, Ground Floor, John Goodsell Building.

2. INFORMATION ABOUT THE COURSE

2.1. UNITS OF CREDIT
This subject or course is worth 6 units of credit.

2.2. CLASS/CONTACT HOURS
There are 2 x 1 hour lectures per week, 1 x 1 hour tutorial class per week and 1 x 1 hour computer lab class once every 3 weeks.

2.3. LECTURE TIMES AND LOCATIONS

<table>
<thead>
<tr>
<th>Group</th>
<th>Day and Time</th>
<th>Location</th>
<th>Lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Mon 1-2, Thu 1-2</td>
<td>MATHEWS B, CENTRAL LECTURE BLOCK 8</td>
<td>TRUONG</td>
</tr>
<tr>
<td>B</td>
<td>Mon 3-4, Wed 2-3</td>
<td>CENTRAL LECTURE BLOCK 7, MATHEWS A</td>
<td>TRUONG</td>
</tr>
<tr>
<td>C</td>
<td>Wed 6-8</td>
<td>APPLIED SCIENCE L1</td>
<td>ABLETT</td>
</tr>
<tr>
<td>D</td>
<td>Tues 1-2, Thu 11-12</td>
<td>MATHEWS A, MATHEWS A</td>
<td>YEUNG</td>
</tr>
<tr>
<td>E</td>
<td>Tues 11-12, Thu 1-2</td>
<td>WEBSTER B, WEBSTER B</td>
<td>ANGUS</td>
</tr>
</tbody>
</table>

2.4. TUTORIAL AND LAB CLASS ENROLMENTS
Tutorials and lab classes start in week 2 of session. Students must enrol by themselves using the university online access into both a tutorial class and a computer lab class.

ECON2291 (Arts and Social Sciences) students will need to go the Faculty Student Centre, Ground Floor, John Goodsell Building to be enrolled into a tutorial class and a computer lab class unless they have already done so.

For other problems concerning tutorial and/or lab classes, students should contact Louis Yeung.

2.5. RELATIONSHIP OF FIRST YEAR QUANTITATIVE METHODS COURSES TO OTHER COURSES
ECON1202 (Quantitative Methods A) is a prerequisite for ECON1203 (Quantitative Methods B). It is also one of the 6 year one core (i.e., compulsory) courses in the Faculty of Commerce and Economics. It is designed to give students a good insight and understanding of how mathematical concepts, theories and techniques are applied to the fields of business, economics and the social sciences in order to generate solutions to problems encountered in these fields. As such, there is more emphasis on application of mathematical knowledge to business, economic and other problems.

ECON1202 (QMA) covers a selection of mathematical topics widely used in commerce, economics and other fields. They constitute the minimum mathematical knowledge and skills that graduates from the Faculty should possess in order to be effective in their later studies at UNSW and in the world of work after they graduate.

FURTHER STUDIES IN ECONOMETRICS AND BUSINESS STATISTICS

The School of Economics currently offers a number of subjects designed to equip students with statistical and other quantitative skills that are widely used and increasingly demanded by employers in commercial fields and the public sector.

The School of Economics offers a major in Econometrics to students enrolled in a B.Ec., which can be combined with majors such as Economics or Finance. The Econometrics major is designed for students who are quantitatively inclined and wish to gain a solid grounding in estimation techniques used in economics and finance. B.Ec students can validly view a training in Econometrics as one way of enhancing their future employment possibilities.

Students interested in learning more about econometrics subjects should feel free to approach a first year Quantitative Methods lecturer.

Students enrolled in a B.Com can also complete a minor or major in Business Statistics. Double majors combining Business Statistics with any other specialisation available in the B.Com are encouraged.

2.6 APPROACH TO LEARNING AND TEACHING

The philosophy underpinning this course and its Teaching and Learning Strategies (see 3.4 below) are based on “Guidelines on Learning that Inform Teaching at UNSW. These guidelines may be viewed at: www.guidelinesonlearning.unsw.edu.au.

3. COURSE AIMS AND LEARNING OUTCOMES
3.1. REQUIRED KNOWLEDGE

The level of assumed knowledge in mathematics required for this subject is the New South Wales (NSW) HSC Mathematics. As is stipulated in the UNSW Undergraduate Handbook 2006, under the headings ECON1202 and ECON2291 on pages 425 & 427 respectively, “Assumed knowledge: A level of knowledge equivalent to achieving a mark of at least 60 in HSC Mathematics. Students who have taken General Mathematics will not have achieved the level of knowledge which is assumed for this course.”

If you have not studied HSC mathematics in New South Wales, knowledge of the following topics is essential: algebra (including logarithms, exponentials, functions and graphs), derivatives and differentiation rules, and simple integration.

If you have not studied any or all of these topics previously, i.e., an appropriate level of mathematics at high school, you should bring this to the attention of the lecturer-in-charge as soon as possible, as remedial work will be necessary. This may imply not taking Quantitative Methods A this session but taking a Mathematics Skills Program offered by the University instead. For further details about the Mathematics Skills Program, you should contact the Admissions Office of the University.

If you meet the assumed knowledge requirement, but feel the need for a refresher course in elementary algebra and calculus, you may wish to purchase the following book available at the UNSW bookshop: Managing Mathematics: A Refresher Course for Economics and Commerce Students by Judith Watson, 2nd edition, 2002.

You can also examine a copy of the book in the Open Reserve Section of the Library.

3.2. COURSE AIMS

The purpose of this course is to

- ensure that you understand mathematical concepts and techniques widely used in economics, accountancy, finance, marketing and the social sciences
- allow you to apply your knowledge to the solution of problems in these disciplines

3.3. STUDENT LEARNING OUTCOMES

Applications of mathematics in accountancy, economics and finance constitute an important part of the subject material with an emphasis on both the formulation and the solution of business and economic problems. In this subject you should develop skills in the areas of mathematics of finance, matrix algebra, linear programming and applied calculus. Through the computing segment of the subject you should become familiar with the use of EXCEL spreadsheets and learn to solve a variety of financial and mathematical problems by using the computer.

3.4. TEACHING AND LEARNING STRATEGIES

The examinable content of the course is defined by the text references given in the lecture
schedule, the content of lectures, the content of the tutorial class booklet and the content of the lab exercises in the computing lab handbook.

LECTURES

The purpose of the lectures is to introduce the topics covered in the subject and and use examples to highlight important points. Not all topics will be presented in detail and you should supplement the lectures by reading the assigned material in the reference books and by attempting a number of the problems presented in the text and reference books. You should attend one lecture group consisting of two 1-hour lectures held on 2 different days or the 2-hour Wednesday lecture every week of session as per page 3, Section 2.3 above.

TUTORIAL CLASSES

You will be allocated to a tutorial group which meets for 1 hour every week except during the first week and week 8 of session (due to mid-session exams). It is imperative that you attend the group to which you are allocated. The object of the tutorials is to discuss alternate approaches to the assigned questions. Some tutorial exercises are meant to be challenging, so you should not be concerned if you have difficulty solving all the exercises before attending the tutorial. However, it is very important to attempt each and every exercise before going to the tutorial class.

If, due to illness or other exceptional circumstances, you are unable to attend your usual tutorial, you may try to attend another tutorial in the same week. In certain circumstances, such as where a request for special consideration is made (see below), tutorial attendance may be taken into account in determining whether a supplementary final exam is offered or not.

A tutorial class booklet will be distributed to students at the same time as this course outline. It contains the weekly tutorial exercises as from week 2 onwards. Students are well advised to attempt these exercises before the tutorial class proper, otherwise, they may have difficulty understanding what is going on in the tutorial class and the solutions to the problems.

The purpose of the tutorial classes is primarily, therefore to provide an opportunity for consolidating what you have learned and understood from the lectures, your subsequent reading and work, and to enable small group discussion of the problems associated with the lecture topics covered in the previous week.

COMPUTING LAB CLASSES

You should attend four 1-hour computing laboratory classes during the session, i.e. one class every three weeks. The weeks for attending your lab classes are determined from your lab allocation according to the suffix A, B or C for your lab class code as follows:

<table>
<thead>
<tr>
<th>LAB CLASS CODE</th>
<th>Attend in weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2, 5, 9, 12</td>
</tr>
<tr>
<td>B</td>
<td>3, 6, 10, 13</td>
</tr>
<tr>
<td>C</td>
<td>4, 7, 11, 14</td>
</tr>
</tbody>
</table>

These laboratory classes will provide an introduction to the EXCEL program and will illustrate important aspects of the subject in a spreadsheet environment. You will be provided with a separate handout outlining the computing lab exercises to be worked through in computing classes.
If you miss your allocated lab class, you should attend a replacement class as soon as possible. **IT IS THE STUDENT’S RESPONSIBILITY TO ENSURE THAT SUCH LAB ATTENDANCE IS RECORDED ON THE VISITORS’ LIST PROVIDED TO THE LAB TUTOR.** Failure to do so may result in the award of an incorrect lab mark at the end of the session. Admittance to another class will, however, depend on the availability of computers in the lab room.

It is worth noting that lab attendance and lab work are worth 5% of the total mark and a compulsory lab question in the final exam paper will account for another 5%.

**LEARNING STRATEGY**

While each student may have his or her own preferred individual learning strategies, it is important to note that most learning will be achieved outside of class time. Lectures can only provide a structure to assist your study, and tutorial time is limited.

An “ideal” strategy (on which the provision of the course materials is based) might include reading of the relevant sections and chapter(s) of the textbook, other references and accessing the lecture notes from the subject website **before the lecture.** This will give you a general idea of the topic area covered in the lecture.

Attempting all the tutorial exercises before the tutorial class is most important as it will identify the things you need to do and know to demonstrate your understanding of the topics, guide your re-reading of specific topics, provide a self-test of your understanding, and identify those topics with which you have problems and take the necessary action to overcome them. All this should be done after the lecture and before the following week’s tutorial.

If there are any remaining problems after the tutorial class, students can consult with the staff members teaching QMA during their consultation times or in PASS groups if they prefer.

**To summarise, therefore in approaching this subject you should**

- concentrate on developing understanding rather than memorising formulae
- attempt a variety of problems from the text, reference books and other resources in addition to those set for tutorials, in order to develop a full understanding
- use classes as an opportunity to learn actively, by participating in discussion and sharing ideas
- be responsible for your own learning, especially by doing adequate preparation and keeping up-to-date

The above strategy aims at developing what is usually known as “High Quality Learning” or HQL. P.NIGHTINGALE & M.O’NEILL in their 1994 book entitled “Achieving quality learning in higher education” emphasise the characteristics of and the conditions for high quality learning as summarized below and it is highly advisable to bear them in mind in
THE CHARACTERISTICS OF HIGH QUALITY LEARNING (HQL)

HQL is characterized by

1. being able to discover knowledge for oneself.
2. long term retention of the knowledge.
3. being able to perceive relations between old knowledge and new.
4. being able to create new knowledge.
5. being able to apply one’s knowledge to solving problems.
6. being able to communicate one’s knowledge to others.
7. one’s wanting to know more.

THE CONDITIONS NECESSARY FOR HIGH QUALITY LEARNING (HQL)

HQL occurs when

1. the learner is ready – cognitively, emotionally – to meet the demands of the learning task.
2. the learner has a reason for learning. The better the reason, the better the learning.
3. the learner explicitly relates previous knowledge to the new.
4. the learner is active during the learning.
5. the environment offers adequate support for the learner.


4. STUDENT RESPONSIBILITIES AND CONDUCT

4.1 IMPORTANT DATES TO REMEMBER
Session 1 2006, Key Dates

It is your responsibility to ensure that:

1. You are recorded by the University as being correctly enrolled in all your courses. The last day for students to discontinue without financial penalty is **Friday March 31** and the last day to discontinue without academic penalty is **Friday 28 April**.

2. You organise your affairs or activities to take account of examination and other assessment dates where these are known. Be aware that your final examination may fall at any time during the session’s examination period. The scheduling of examinations is controlled by the University administration. No early examinations are possible. The examination period for Session 1, 2006 falls between **16 June and 4 July**.

3. When the provisional examination timetable is released (**May 9**), ensure that you have no clashes or unreasonable difficulty in attending the scheduled examinations. The final examination timetable is released on **Tuesday 30 May**.

4. You keep the University informed of all changes to your contact details (address, phone etc.).

A full list of UNSW Key Dates is located at: [https://my.unsw.edu.au/student/resources/KeyDates.html](https://my.unsw.edu.au/student/resources/KeyDates.html)


4.2. WORKLOAD

At the university, you have to be responsible for your own learning and acquisition of knowledge. You cannot blame others for your failure. The lectures, tutorials, textbook and all other resources are meant to assist and guide you in this quest for knowledge. However, it is entirely up to you as to how much work you do for this course. As a benchmark, an undergraduate student is expected to study at the rate of 10 hours per week per course, inclusive of lectures, tutorials, reading reference materials, lecture and tutorial preparation and additional study. It is also your responsibility to choose the learning approach best suited to your learning style and your objectives for the course.

Over-commitment has been a cause of failure for many students. You should take the required academic workload into account when planning how to balance study with employment and other activities.

4.3. ATTENDANCE

Your regular and punctual attendance at lectures and all other classes is expected in this course. University regulations indicate that if students attend less than eighty per cent of scheduled classes, they may be refused final assessment.

4.4. GENERAL CONDUCT AND BEHAVIOUR

Students attending any class are expected to be considerate and respectful of other fellow students and teaching staff. They must not disrupt the class by talking or by any other action (such as ringing or talking on mobile phones), thus affecting the participation of other students in the class.
Students will be given one warning by teaching staff if they are deemed to be disruptive in class, and if such disruptive behaviour persists, they will then be asked to leave the class. More information on student conduct is available at: www.my.unsw.edu.au

4.5. KEEPING INFORMED

Students must keep track of all announcements made in lectures, tutorials or on the course website. It will be assumed that all students are well informed about these announcements made in class or posted on the course website. From time to time, the University will send important announcements to your university e-mail address without providing you with a paper copy. You will be deemed to have received this information.

5. STUDENT ASSESSMENT

5.1. PASSMARK

In order to pass the course, you must obtain a total mark of at least 50 out of a maximum of 100. The total mark is the sum of all coursework and final exam marks. Coursework consists of 2 quizzes, midsession exam and lab attendance work during session.

A student is eligible for a Pass Conceded (PC) if a mark of between 46 and 49 inclusive is obtained. If the mark is 46 or 47, then the student must also score a term Weighted Average Mark (WAM) of at least 55. If the mark is 48 or 49, then the student must also score a term Weighted Average Mark (WAM) of at least 53. For more details, see Undergraduate Handbook 2006, p.37, section 3.2.7.

5.2. ASSESSMENT DETAILS

<table>
<thead>
<tr>
<th>Percentage of total mark</th>
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</thead>
<tbody>
<tr>
<td>Quiz Marks</td>
</tr>
<tr>
<td>Attendance and work at computing laboratory classes</td>
</tr>
<tr>
<td>Mid-session Examination</td>
</tr>
<tr>
<td>Final Examination at the end of session:</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

5.2.1. TUTORIAL QUIZZES

Two 15-minute quizzes will be conducted during tutorials in the weeks commencing April 3 (Week 6) and May 22 (Week 12). Each quiz will consist of one or two problems similar to
exercises assigned in previous weeks. The first quiz will examine lecture topics 2-8 and the second will examine lecture topics 9-16. Each quiz will be worth 5% of the total mark for the subject.

Students must attend their usual tutorial for quizzes. Changes will only be permitted in case of severe illness or other exceptional circumstances. In these circumstances, contact the lecturer-in-charge, Louis Yeung (room 103, JOHN GOODSELL BUILDING, Tel. 9385 3286). Also, if a student has not sat for any quiz assessment, he/she must provide an explanation in writing and the reason(s) for missing the quiz to the lecturer-in-charge, Louis Yeung. OTHERWISE, A ZERO MARK WILL BE AWARDED FOR NOT TAKING THE QUIZ.

There is no supplementary or replacement exam for the quizzes. If you miss these assessments for a good and valid reason, you must contact the lecturer-in-charge and documentary evidence must be provided. Adjustments will then be made to the final exam mark on a pro-rata basis.

5.2.2. LAB WORK ASSESSMENT

A maximum of 5 marks will be awarded for attending and doing satisfactorily all the 4 lab sessions prescribed. Any lab session missed without good reason will entail the loss of 1 mark. However, missing all 4 lab sessions without providing satisfactory explanation to the lecturer-in-charge will mean a zero mark for no lab attendance and work done.

In addition, there will be a compulsory lab question in the final exam paper.

5.2.3. MIDSESSION EXAMINATION

The Midsession Exam will contain 20 multiple-choice questions to be answered in 75 minutes on topics from lectures 2-12 and is worth 20% of total marks. No marks will be deducted for incorrect answers. The exam will be held in week 8 of session on Friday 28 April. The time and location will be announced in due course. Students are expected to arrive at the exam no later than 15 MINUTES before the start of the exam. Also, if a student has not sat the midsession exam, he/she must provide an explanation in writing and the reason(s) for missing this exam to the lecturer-in-charge, Louis Yeung. OTHERWISE, A ZERO MARK WILL BE AWARDED FOR NOT TAKING THE MIDSESSION EXAM.

There is no supplementary or replacement exam for the mid-session exam. If you miss the mid-session exam for a good and valid reason, you must contact the lecturer-in-charge and documentary evidence must be provided. Adjustments will then be made to the final exam mark on a pro-rata basis.

The main purpose of the mid-session exam is to test knowledge of the topics covered so far, and the ability and skills of the students to solve the problems and carry out exact calculations.

5.2.4. FINAL EXAMINATION

The Final Exam will be held during the university examination period (16 June - 4 July) and
will last for 3 hours. It will consist of one compulsory lab question and five compulsory problems on topics from the whole course. It is worth 65% of total marks.

The purpose of the final exam is to assess the knowledge of the topics covered in the course and the reasoning ability and skills of the students in solving the problems and carrying out exact calculations.

**5.3. SPECIAL CONSIDERATION & SUPPLEMENTARY EXAMINATION**

**5.3.1. SPECIAL CONSIDERATION**

If you believe that your performance in an assessment, either during session or in an examination, has been adversely affected by sickness or other adverse circumstances, you should formally apply for special consideration.

Applications for special consideration must be accompanied by appropriate documentation. They must be made as soon as practicable after the problem occurs and within three working days of the assessment to which it refers. In the case of ECON1202/2291(QMA), the assessment will usually be the final exam.

Special consideration request forms are available from UNSW Student Central (formerly known as NewSouthQ) and from the web [www.my.unsw.edu.au/student/atoz/SpecialConsideration.html](http://www.my.unsw.edu.au/student/atoz/SpecialConsideration.html). The completed application form must be submitted to UNSW Student Central and a copy of the application form must also be given to the lecturer-in-charge.

For more details on this matter of SPECIAL CONSIDERATION, see UNSW Undergraduate Handbook 2006, p.31-32.

**5.3.2. SUPPLEMENTARY FINAL EXAMINATION**

You should be aware that lodgement of a request for special consideration does not guarantee the granting of a supplementary final exam. Supplementary final examinations will only be recommended by the School of Economics for students whose final examination performance has been affected by serious illness or other extraordinary circumstances which can be documented AND if there is evidence on the basis of performance during the session that the student has made satisfactory progress.

THE SUPPLEMENTARY FINAL EXAMINATION FOR THIS SUBJECT WILL BE HELD ON THE MORNING OF THURSDAY 13 JULY 2006. STUDENTS EXPECTED TO BE GRANTED, OR GRANTED, A SUPPLEMENTARY EXAM MUST BE AVAILABLE ON THIS DAY TO TAKE THE EXAMINATION. FAILURE TO TAKE THE SUPPLEMENTARY EXAM WILL NORMALLY RESULT IN A FAILING (FL) GRADE. NO OTHER OPPORTUNITY TO SIT THE SUPPLEMENTARY FINAL EXAM WILL BE PROVIDED EXCEPT IN SPECIAL CIRCUMSTANCES.

**6. ACADEMIC HONESTY AND PLAGIARISM**

**6.1. STUDENT MISCONDUCT**
Students are reminded that the University regards academic misconduct as a very serious matter. Students found guilty of academic misconduct are usually excluded from the University for 2 years. Because of the circumstances in individual cases the period of exclusion can range from one session to permanent exclusion from the University.

The following are some of the actions which have resulted in students being found guilty of academic misconduct in recent years:

1. Taking unauthorised materials into an examination.
2. Submitting work for assessment knowing it to be the work of another person.
3. Improperly obtaining prior knowledge of an examination paper and using that knowledge in the examination.
4. Failing to acknowledge the source of material in an assignment.

For more details on this matter of ACADEMIC MISCONDUCT AND STUDENT MISCONDUCT, see UNSW Undergraduate Handbook 2006, p.28.

6.2. PLAGIARISM

Plagiarism is the presentation of the thoughts or work of another as one’s own.* Examples include:
- direct duplication of the thoughts or work of another, including by copying work, or knowingly permitting it to be copied. This includes copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork,
design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person’s assignment without appropriate acknowledgement; 
• paraphrasing another person’s work with very minor changes keeping the meaning, form and/or progression of ideas of the original; 
• piecing together sections of the work of others into a new whole; 
• presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and, 
• claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

Submitting an assessment item that has already been submitted for academic credit elsewhere may also be considered plagiarism.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

Students are reminded of their Rights and Responsibilities in respect of plagiarism, as set out in the University Undergraduate and Postgraduate Handbooks, and are encouraged to seek advice from academic staff whenever necessary to ensure they avoid plagiarism in all its forms.

The Learning Centre website is the central University online resource for staff and student information on plagiarism and academic honesty. It can be located at:

www.lc.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

• correct referencing practices;
• paraphrasing, summarising, essay writing, and time management;
• appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne.

MORE DETAILS ABOUT PLAGIARISM AT THE FOLLOWING WEBSITE

http://www.my.unsw.edu.au/student/atoz/Plagiarism

7. STUDENT RESOURCES

7.1. COURSE WEBSITE

A wide range of information about the course will be available at the website address http://www.vista.elearning.unsw.edu.au/. To log in, you will need to click on the UNSW link,
click “Log in” and then enter your student number prefixed with a lower case z and your unipass password. Then click on “ECON1202/2291 - Quantitative Methods A”.

Students should consult this website at least once a week as it contains important information about the course. It will be assumed that all students have seen any notice posted on the course website.

7.2. TEXTBOOK

The required textbook for this subject is:


7.3. OTHER REFERENCES

The following books, available in the Open Reserve section of the library, are also useful references for certain parts of the course. In a few instances, they cover material which is not adequately treated in the textbook. For more details see the Suggested Reading section on pages 18-20.

John Shannon, Mathematics for Business, Economics and Finance, John Wiley & Sons, 1995. (The solutions manual to this book is also available).[Referred to as JS in the lecture outline.]


7.4. EQUIPMENT REQUIRED

A basic scientific calculator is required for this subject. Most students find the calculator used at school is satisfactory. It must be capable of logarithmic and exponential calculations, including $x^y$. If you need to purchase a new calculator, keep in mind that for Quantitative Methods B, it will be desirable to have a two variable statistical mode to perform linear regression (LR) calculations. The calculator, CASIO fx-911W, may be a suitable one.

Programmable calculators (with a full alphabetic keyboard), graphic calculators, financial calculators and hand held computers CAN NOT be used during examinations or quizzes in QMA.

You should also purchase a 3½” IBM format high density diskette for data storage in computing laboratories.

7.5. CONSULTATION WITH STAFF
Students are encouraged to ask questions related to this subject during tutorials. Those requiring extra assistance may take advantage of the times especially reserved by staff for consultation. A list of these consultation times will be posted on the course website once teaching commitments are finalised. All consultations with part-time staff will be held in JG G18.

7.6. PEER ASSISTANCE SUPPORT SCHEME (PASS)

This scheme usually commences in Week 3 and consists of study groups run by second and third year students. QMA students are able to join a group of their choice on a voluntary basis. Many students have found PASS helpful as it provides both extra problems for practice and advice from experienced students. It also provides an informal atmosphere with the opportunity to ask any questions that students may be hesitant to ask staff. More information, including the times of PASS groups, will be distributed during the Week 2 lectures. A list of times will also appear on the course website and the noticeboard, second floor, John Goodsell Building.

7.7. THE EDUCATION DEVELOPMENT UNIT (EDU)

Additional learning and language support is available from the Education Development Unit (EDU) in the Faculty. The EDU provides individual and small group consultations, academic skills workshops, discipline-specific support workshops and a range of study skills resource materials and handouts. Students requiring advice and assistance with assignment writing, academic reading and note-taking, oral presentation, study skills or other learning needs are advised to drop in or contact the learning consultants in the Unit which is located in Room 2039, Level 2, Quadrangle Building.

You can go to the EDU internet homepage at [http://education.fce.unsw.edu.au](http://education.fce.unsw.edu.au) for more information.

The service is free and available only to students in this Faculty. Students are encouraged to take full advantage of this extra support.

7.8. LEARNING CENTRE

The Learning Centre provides a free and confidential service offering learning and language support to UNSW students. Assistance is provided through workshops, discipline-based courses and individual consultations. The Learning Centre is located at Room 231, Level 2, Library Building; phone 9385 3890.

7.9. COUNSELLING SERVICE

Counsellors offer assistance in planning, decision making, problem solving, and social and emotional development. The Counselling Service is located at Level 2, East Wing, Quadrangle Building; phone 9385 5418.

Those students who have a disability that requires some adjustment in their teaching and learning environment are encouraged to discuss their study needs with the Lecturer in Charge or with the Equity Officer (Disability) prior to, or at the commencement of, their course. The Equity and Diversity Unit can be contacted through 93854734 or [www.equity.unsw.edu.au/disabil.html](www.equity.unsw.edu.au/disabil.html).
Students should be aware of Faculty Occupational Health and Safety policies and expectations. See
www2.fce.unsw.edu.au/nps/servlet/portalservice?GI_ID=SystemLoggedOutInheritableArea&max
Wnd=_Staff_Info_OHS

7.10. NOTICEBOARD AND PIGEONHOLE LOCATION

The noticeboard to be used for this subject is located between rooms 221 and 223 on the second floor of the John Goodsell building. It will be used for all announcements regarding lecture, tutorial and laboratory locations and other matters.

Spare copies of handouts distributed in lectures will be placed in the ECON 1202 pigeonhole in room 223, John Goodsell Building, which is accessible during office hours. Lecture notes distributed will be placed on the course website.

8. CONTINUAL COURSE IMPROVEMENT

Each year feedback is sought from students and other stakeholders about the courses offered in the School and continual improvements are made based on this feedback. UNSW's Course and Teaching Evaluation and Improvement (CATEI) Process (http://www.ltu.unsw.edu.au/ref4-5-1_catei_process.cfm) is one of the ways in which student evaluative feedback is gathered.

EQUAL OPPORTUNITY IN EDUCATION IS UNIVERSITY POLICY.

ACKNOWLEDGEMENT

This course outline owes much to the ECON1101 course outline by Trevor Stegman to whom I wish to offer my grateful thanks.

Louis YEUNG,
Lecturer-in-Charge,
ROOM 103, JOHN GOODSELL BUILDING
Phone : 9385 3286
Email : L.Yeung@unsw.edu.au
# 9. LECTURE SCHEDULE

## APPROXIMATE LECTURE OUTLINE

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Day</th>
<th>Lect. No.</th>
<th>Topics</th>
<th>Suggested Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb 27,28</td>
<td>Mon,Tue</td>
<td>1</td>
<td>Administrative matters. An overall view of the course.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mar 6,7</td>
<td>Mon,Tue</td>
<td>3</td>
<td>Time value of money. Simple and compound interest. The exponential constant. Continuous compounding.</td>
<td>KZB p.12, KZB1.1,1.2,2.1, HPW 5.1, p.505, 10.3</td>
</tr>
<tr>
<td>3</td>
<td>Mar 13,14</td>
<td>Mon,Tue</td>
<td>5</td>
<td>Net Present Value. Internal Rate of Return.</td>
<td>HPWp.225-6, JS 7.6(A),(B), KZB 8.1,8.2</td>
</tr>
<tr>
<td>4</td>
<td>Mar 20,21</td>
<td>Mon,Tue</td>
<td>7</td>
<td>Sinking Fund. Loan Amortisation.</td>
<td>HPW p.235-6, KZB 7.8, HPW 5.4</td>
</tr>
<tr>
<td></td>
<td>Mar 22,23</td>
<td>Wed,Thu</td>
<td>8</td>
<td>General Annuities Deferred Annuities. Perpetuities.</td>
<td>KZB 5.1-5.3, JS 7.5(D), KZB 3.5-3.6, JS 7.5 (F)</td>
</tr>
<tr>
<td>5</td>
<td>Mar 27,28</td>
<td>Mon,Tue</td>
<td>9</td>
<td>Depreciation methods.</td>
<td>JS 7.7, KZB p.235-9</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Day</td>
<td>Lect. No.</td>
<td>Topics</td>
<td>Suggested Reading</td>
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</tr>
<tr>
<td>6</td>
<td>April 3,4</td>
<td>Mon, Tue</td>
<td>11</td>
<td>Definition of the inverse. Matrix Reduction.</td>
<td>HPW p.291-3, DL p.82-84, HPW p.278-280</td>
</tr>
<tr>
<td>7</td>
<td>April 10,11</td>
<td>Mon, Tue</td>
<td>13</td>
<td>Characteristics of solutions. Determinants.</td>
<td>HPW 6.5, DL 5.1,4.5, JS 4.6</td>
</tr>
<tr>
<td></td>
<td>April 12,13</td>
<td>Wed, Thu</td>
<td>14</td>
<td>Inverse by the adjoint method. Cramer’s Rule.</td>
<td>DL 4.6, JS 4.7,4.8, DL p.112-3</td>
</tr>
</tbody>
</table>

**SESSIOQN BREAK APRIL 14-23**

| 8    | April 24-27| Mon-Thu   |           | **NO CLASSES THIS WEEK DUE TO MID-SESSION EXAMS**                        |                   |

**28 APRIL FRIDAY** MID-SESSION EXAM

Time and Location to be announced in due course

<p>| 9    | May 1,2    | Mon, Tue  | 15        | Linear programming. The graphical approach.                            | HPW 7.1-7.3       |
|      | May 3,4    | Wed, Thu  | 16        | Changing constraints or the objective function.                        | CM Ch.19          |</p>
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Day</th>
<th>Lect. No.</th>
<th>Topics</th>
<th>Suggested Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>May 15,16</td>
<td>Mon,Tue</td>
<td>19</td>
<td>Maxima and minima of functions. Concave and convex functions.</td>
<td>HPW 13.1, 13.3,13.4,13.6</td>
</tr>
<tr>
<td></td>
<td>May 17,18</td>
<td>Wed,Thu</td>
<td>20</td>
<td>The indefinite integral. Integration rules. The definite integral and applications.</td>
<td>HPW 14.2-14.5, 14.7,14.8, 14.10</td>
</tr>
<tr>
<td>12</td>
<td>May 22,23</td>
<td>Mon,Tue</td>
<td>21</td>
<td>Introduction to differential equations. Exponential Growth</td>
<td>HPW 15.5</td>
</tr>
<tr>
<td></td>
<td>May 24,25</td>
<td>Wed,Thu</td>
<td>22</td>
<td>Limited Growth. Logistic Growth.</td>
<td>HPW 15.6</td>
</tr>
<tr>
<td>13</td>
<td>May 29,30</td>
<td>Mon,Tue</td>
<td>23</td>
<td>Multivariable functions. Level curves. Partial and total derivatives.</td>
<td>HPW 17.1-17.6, DL 8.1-8.2</td>
</tr>
<tr>
<td></td>
<td>May 31,</td>
<td>Wed,Thu</td>
<td>24</td>
<td>Unconstrained optimisation of functions of 2 variables. Constrained optimisation.</td>
<td>HP 17.7-17.8 DL 8.3-8.5</td>
</tr>
<tr>
<td></td>
<td>June 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>June 5,6</td>
<td>Mon,Tue</td>
<td>25</td>
<td>REVISION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>June 7,8</td>
<td>Wed,Thu</td>
<td>26</td>
<td>REVISION</td>
<td></td>
</tr>
</tbody>
</table>