STAT279 OPERATIONS RESEARCH I E2 2004
INFORMATION FOR STUDENTS

TEXT
The text for this course will be
Quantitative Decision Making (7th Ed)
by Lawrence L Lapin & William D Whisler (Duxbury Press)
All references about material covered will be to this book.
Note that in the back cover there is a CD with a new version of QuickQuant.
However we will use the previous version and that is the one available in the C5C computer labs.

REFERENCES
Operations Research Applications and Algorithms (3d Ed)
by Winston W. L.(PWS Kent)
Operations Research: An Introduction
by H A Taha (Macmillan)

LECTURES AND PRACTICALS
Lectures in weeks 1-6 will be taken by Michael Petersons
Lectures in weeks 7-13 will be taken by Sibba Gudlaugsdottir

Each week there will be
    three hours of lectures - Mon 6-9pm
and one hour of practical.   – Tue 5pm or 6pm or 7pm
Practicals will commence in week 2 of the semester.
The practicals are meant to be a learning exercise. Participation in the practicals is essential for your understanding of the course content and the solution of problems.

Before the practical each week you should prepare the set of problems as stipulated in the lecture in the previous week. The lecturer will go over those problems and hand out a further problem that you will work through in class.

During the **PRACTICALS** in weeks **4** and **10** you will be asked to solve a set of questions called **quizzes** made up of multiple choice questions. They will be collected and marked.
The mark for the quizzes DOES count towards final assessment.
Each quiz is worth 5% of the total assessment.

ASSESSMENT
Class Test
There will be a class test in this unit, worth 10% of total assessment.
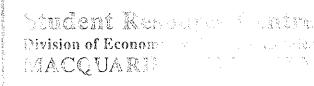The class test will be held in the Monday 6 pm **LECTURE** in **week 7**
The class test is **closed book**.
The class test is **compulsory** and there will be NO make up tests.

If you miss the class test you must submit relevant documentation or you may receive a fail grade for the unit. A valid absence will mean your other coursework marks will be scaled up.

The Class Test covers lecture material from weeks 1-6 inclusive and will be of 60 minutes duration.

        You should bring to the test
          a calculator
          writing implements
          a ruler

Students can pick up their marked class test papers from ERIC -C5C244. Students will have to show their student ID in order to get their papers back. Solutions to the class test will be summarised in the practicals in week 8.

The class test will enable you to get feedback and continuing information about your progress in this unit.

Quizzes

There are 2 (two) quizzes, each worth 5% of total assessment.

The quizzes will be held in the **PRACTICALS** in **week 4 and 10.**

Both the quizzes are **closed book**. Both quizzes are **compulsory** and there will be NO make up quizzes. If you miss a quiz you must submit relevant documentation or you may receive a fail grade for the unit. A valid absence will mean your other quiz will be worth double.

The first Quiz covers material from lecture weeks 1-3 inclusive.

The second Quiz covers lecture material from weeks 4-9 inclusive.

Each Quiz is of 10 – 15 minutes duration.

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You should bring to the quizzes

a calculator

writing implements.

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Students getting **below half marks** in the combined marks for the tests and quizzes will be **downgraded by one grade** from their performance in the final exam.

Quizzes will not be returned to students since they are multiple choice but the marks will be published on the statistics notice board during the week after the quiz.

Final Examination

The final exam will be closed book and held during the end of year exam session. It will be worth 80% of the total assessment. and will cover the whole semesters work.

NOTE: To obtain a passing grade in the course a **satisfactory performance** will be required **in the final exam** irrespective of any marks gained during the semester.

Evidence from your tests and quizzes will be used in determining the final grades.

Summary of Assesment	
Test	10%
Quiz 1	5%
Quiz 2	5%
Final Exam	80%

PLAGIARISM

Plagiarism involves using the work of another person and presenting as one's own. Any of the following acts constitutes plagiarism unless the source of each quotation or piece of borrowed material is clearly acknowledged:

   (a) copying out part of any document or audio-visual material (including computer based material)
   (b) using or extracting another person's concepts, experimental results or conclusions
   (c) summarising another person's work
   (d) submitting substantially the same final version of any material as another student in an assignment where there was collaborative preparatory work.

Encouraging or assisting another person to commit plagiarism is a form of improper collusion and may attract some penalties.

CALCULATORS

You will be able to use a non-programmable calculator in any test or exam.

SCHEDULE

WEEK	Commences	TOPIC	CHAPTER	Homework Exercise Due and assessments
1	2 August	Introduction LP Formulation	1, 8.1-6	
2	9 August	LP Formulation Graphical Solutions and QuickQuant	8.7-12 9.1-4	Homework Exercise for week 2
3	16 August	Simplex Method Sensitivity & Duality	10.1-10.5	Homework Exercise for week 3
4	23 August	Sensitivity & Duality	10.1-10.5	Quiz 1 - during PRACTICAL Homework Exercise for week 4
5	30 August	Project Planning	14.1-5, 7	Homework Exercise for week 5
6	6 September	Simulation	18.1,3,8,9	Homework Exercise for week 6
7	13 September	Transportation	12.1, 2	Test - during MON 6pm LECTURE
Mid semester break				
8	4 October	Monday October 4 – Public Holiday		Class test solutions provided during practical Homework Exercise for week 8
9	11 October	Transportation Transshipment Assignment models	12.4,5,8,6,7	Homework Exercise for week 9
10	18 October	Inventory Decisions	15.1-4	Quiz 2 - during PRACTICAL Homework Exercise for week 10
11	25 October	Queueing	17.1-3	Homework Exercise for week 11
12	1 November	Queueing	17.4 17.6, 17.9	Homework Exercise for week 12
13	8 November	Revision		