

The University of Western Australia

School of Mathematics & Statistics

**INFORMATION GUIDE FOR
FIRST YEAR STUDENTS**

2006

Welcome.....	2
1. Units	3
List of units for first semester	3
List of units for second semester	3
First Year Unit Coordinators	4
Queries about your unit.....	4
Suggestions and complaints	4
2. Activities in your unit	5
Overview	5
Practical arrangements	5
Workshops, practice classes, laboratory sessions and assignments.....	6
Tests, Examinations and Assessments	6
Assignments	6
Cheating	7
Class Mailing Lists	7
Calculators	7
3. Facilities	7
Mathematics Computing Laboratory (MCL)	7
Mathematics Learning Centre.....	8
4. Assessment	8
5. Emergency Procedures and Map	9

Welcome

Welcome to The University of Western Australia and to your first-year studies in Mathematics and Statistics.

Whether you need just a single unit of mathematics or statistics for your chosen degree, or are planning an entire degree course in the mathematical sciences, we are delighted to welcome you to the School of Mathematics & Statistics. Our staff aim to help you get the maximum benefit from your studies; the School offers many facilities to assist you in your coursework, and to help you in case you experience problems.

This guide explains how first-year units are organized, gives information about the School of Mathematics & Statistics, and offers some advice on how to get the most from your course.

**PLEASE READ THE WHOLE OF THIS DOCUMENT
AND KEEP IT FOR LATER REFERENCE**

The information in this guide was correct at the time of printing (February 2006). Updates and further information can be found on the School's Web page:

<http://www.maths.uwa.edu.au>

We are proud of our reputation as one of Australia's best university schools of mathematical sciences --- and one of the top 25 in the world, by some measures. Welcome to the School, and we hope your studies with us will be rewarding, stimulating, useful and enjoyable.

A/Prof Les Jennings
Head of School

Dr Des Hill
First Year Co-ordinator

1. Units

List of units for first semester

The first year units available in first semester 2006, together with their pre-requisites, are:

<u>Unit</u>	<u>Code</u>	<u>Pre-requisite</u>
Calculus and Linear Algebra	MATH1010	TEE Calculus and TEE Applicable Mathematics
Calculus, Statistics and Probability	MATH1020	TEE Calculus and TEE Applicable Mathematics
Calculus and Modeling	MATH1165	TEE Calculus and TEE Applicable Mathematics
Calculus B	MATH1040	TEE Applicable Mathematics
Calculus C	MATH1050	TEE Discrete Mathematics
Economics and Business Statistics (available only to Economics and Commerce Students)	STAT1106	TEE Applicable Mathematics or ECON1111 Quantitative Methods for Business and Economics

Note: If you have a scaled mark above 54% in TEE Calculus you may not enrol in MATH1140. If you have passed TEE Calculus with a mark less than or equal to 54% you may enrol in either MATH1165 or MATH1040.

If you have any doubts as to whether you are enrolled in the appropriate mathematics units, you should see one of the first year advisers (ask at the Enquiries Counter in the school, see map on last page) or your Faculty Sub-Dean as soon as possible.

Some first-year mathematics units are divided into *lecture streams*. You are assigned to a particular lecture stream, and changing streams is usually not permitted unless required by your timetable.

List of units for second semester

The first year units available in second semester of 2006, together with their pre-requisites, are:

<u>Unit</u>	<u>Code</u>	<u>Pre-requisite</u>
Calculus and Linear Algebra	MATH1010	TEE Calculus and TEE Applicable Maths
Calculus, Statistics and Probability	MATH1020	TEE Calculus and TEE Applicable Maths
Calculus C	MATH1050	TEE Discrete Mathematics
Statistics A	STAT1160	TEE Applicable Mathematics and some basic calculus
Statistics B	STAT1123	MATH1050 Calculus C
Economics and Business Statistics (available only to Economics and Commerce Students)	STAT1106	TEE Applicable Mathematics or ECON1111 Quantitative Methods for Business and Economics

First Year Unit Coordinators

The staff member responsible for the overall coordination of first year mathematics & statistics units in 2006 is:

Dr Des Hill, First Year Coordinator
Room 1.05, Mathematics Building
Tel: 6488 3357; email des@maths.uwa.edu.au

Each unit has a coordinator (or lecturer-in-charge) who is responsible for the organization of that unit. In 2006, these unit coordinators for first semester are:

<u>Unit</u>	<u>Coordinator</u>	<u>Office</u>	<u>Telephone</u>
MATH1010	A/Prof. Bill Longstaff	201	6488 3374
MATH1020	A/Prof. Tim Penttila	106	6488 3227
MATH1165	Dr Neville Fowkes	115	6488 3355
MATH1040	Ms Kathleen Chindarsi	120	6488 3352
MATH1050	Ms Wally Andrioni	230	6488 3359
STAT1106	Dr Nazim Khan	117	6488 3369

Queries about your unit

If you have any queries or problems about a particular unit, **see your lecturer first**, and then, if necessary, the First Year co-ordinator (**Dr Des Hill, Office 1.05, phone 6488 3357, email des@maths.uwa.edu.au**).

If you have queries relating to your first year course as a whole, or which involve more than one unit, you should go to the Mathematics Enquiries Counter (first floor, see map on last page of guide) and ask to speak to one of the first year advisers.

Suggestions and complaints

Please tell us if you have any suggestions, comments, complaints, or grievances about a unit. We welcome your views about our teaching, lecture content, and any other aspect of your course. If you have a grievance please be assured that **no-one will be penalised in any way for making a complaint**.

2. Activities in your unit

The unit in which you are enrolled is a package of many activities: lectures, workshops, practice classes, computer laboratory sessions, assignments, tests, and most of all, your own study.

Overview

Lectures are used for the exposition of principles and theory. The lecturer will illustrate and reinforce this by working through carefully chosen examples. However, lectures differ from school lessons in that they usually are not interrupted by organised class activities. Hands-on working of mathematics is something you do in workshops, practice classes or laboratory sessions, and in your own time, either alone or with friends. In developing your understanding of the unit material you will also need to use your textbooks, any background notes issued for the unit and such reference material as your lecturers suggest.

For each unit you take, there are at least 5 hours of scheduled formal activity (4 lectures, plus at least one workshop, practice class or laboratory session). As a general rule, you should match this with at least an equal amount of work in your own time, including time spent on assignment work and reading ahead in the textbook. Substantially less working on your own will lessen your chances of success.

The whole package (lectures, workshops, practice classes and laboratory sessions) is designed to help you begin to assume responsibility for your own education. Indeed, a principal objective of your degree programme is developing in you the ability to access and digest new information, and to adapt it to deal with problems arising in novel situations. If you want help outside of formally scheduled class times first go to the Mathematics Learning Centre with your questions (see later for more information about the Centre). Your lecturers and any teaching assistants or demonstrators assigned to the unit will help you when necessary. Make sure you make a note of the **names** and **office numbers** of your mathematics lecturers, teaching assistants and demonstrators. You may also need to check their times of availability. They will usually have other duties (teaching, research and administration) in addition to your unit so cannot be continuously available.

The timetabling of lectures workshops and practice classes is undertaken centrally and not by the School. Unfortunately it is not usually possible for the lecturer to change lecture times. If more than one stream is offered, it may be possible to switch streams to avoid timetable clashes.

Practical arrangements

It is **your** responsibility to collect announcements about unit organization, tests, assignments, etc. The School cannot make unlimited copies of such material, so please refrain from "collecting for friends". If you miss any of the handouts issued at lectures, you will find spare copies placed in the appropriate boxes in the foyer of the Mathematics Building adjacent to the Enquiries Counter (first floor, see map on last page). Also check the School's Web site for information.

If in any class the lecturer appears to have been detained, let us know after 5 minutes from the scheduled start time by contacting the Mathematics Enquiries Counter.

Workshops, practice classes, laboratory sessions and assignments

The arrangements for workshops, practice classes and laboratory sessions are different for different units, and the details for your unit will be explained in lectures.

In mathematics merely listening or reading are not enough. You need practice at doing mathematics for yourself and working routine problems will reinforce concepts and develop skill in calculation and reasoning. Your lecturer will give you regular assignments of exercises and problems. In workshops, practice classes and laboratory sessions you will be able to have more direct contact with members of the academic staff, and there will be opportunity for you to discuss any difficulties which may have arisen from the lecture material, or discuss alternative solutions or some similar problems.

You are expected to make any difficulties known and to participate in the discussion at workshops, practice classes and laboratory sessions. Learning occurs largely through the elimination of errors and misunderstandings, so don't be afraid to make a mistake or to speak up. The benefit you receive from all classes will be greater if you prepare beforehand, e.g., by revising and digesting lecture theory and examples, and by working some of the assigned problems (if they are distributed ahead of time).

Tests, Examinations and Assessments

Formal first semester examinations are held during the June examination period, beginning one week after the end of the semester. Short tests during semester will also be part of the assessment procedure for most units. **Details of assessment in the unit will be given in the unit handouts.** The School of Mathematics and Statistics is in the Faculty of Engineering, Computing and Mathematics and is governed by the faculty rules on scaling.

Assignments

A selection of problems and exercises will be assigned on a regular basis. In most units you (usually as one of a group of 3 or so students) will be required to hand in solutions to some of these problems for marking. Each marked assignment will be handed back to you the week after it is handed in, usually in a workshop session. **The marked assignment work will count towards your final grade.** In some units part of the assessment will be of work with a computer-based tutorial system. If you are unable to hand in any required assignment work on time, it is essential that you inform the coordinator of your unit as soon as possible. Usually there will be a penalty handing work in late unless you have a medical certificate or some other valid reason.

Solutions to assigned problems will be displayed, on noticeboards on the outside ground floor of the Mathematics Building or on the web or in some other way depending on the unit. Details will be given in lectures. This means that the workshop and practice class times will not generally be taken up by a reworking of all of these problems. However, it is essential that you make a serious attempt at all the assigned problems if you are to gain any real understanding of the concepts and techniques in the course.

Working on non-credit problems will not be wasting time as it will help you to be more confident and better prepared for the end-of-semester exams. Our experience shows that students who put in this extra effort are much more likely to pass.

If for any reason you find the assignments quite beyond you, you should get in touch with your lecturer and discuss the situation; in such a case you may find it advisable to transfer to another unit.

Cheating

Plagiarism and other forms of cheating are treated severely. This certainly does not mean you should not discuss your work with other people. On the contrary, this is an excellent way to learn. In those units with workgroups you will be required work with other students in preparing a joint assignment. This means you will be expected to try all assignment problems and put your ideas together with those of the rest of your group to decide on the best solution and how to best present it. That's fine. What would not be fine would be if you simply copied another group's work and presented it as your own. That would be plagiarism. The school belongs to the Faculty of Engineering, Computing and Mathematics, and is bound by that Faculty's policy on plagiarism. The penalties described in it apply whether you are enrolled in this faculty or not. Please refer to this webpage:

<http://www.ecm.uwa.edu.au/for/staff/pol/plagiarism>

Class Mailing Lists

The names of students enrolled in each unit will be entered into an electronic mailing list for that unit. The unit coordinator may use the list to send information to students at their university (tartarus) email addresses. Therefore it is **very important** that you either check your tartarus account frequently or arrange to link it to an email address which you do check often.

Calculators

Many of you will own a graphics calculator and you may well find it useful at times in your mathematical work. However, no amount of button-pushing is a substitute for understanding. This is one of the reasons why these calculators are banned from tests and exams in all units taught in this school. The current list of the types of scientific calculators approved for use in tests and exams is on the webpage:

<http://www.ecm.uwa.edu.au/for/staff/pol/calculators>

3. Facilities

Mathematics Computing Laboratory (MCL)

The Mathematics Computing Laboratory is on the first floor of the Mathematics Building, near the Enquiries Counter. It has 128 computers and is used for scheduled laboratory classes for units in Mathematics & Statistics, Engineering, and other disciplines. Most mathematics & statistics units will require you to attend the MCL for laboratory classes where you will use software packages for illustrative purposes or for the completion of assignment work. You will need to register for an MCL account to use the computers. An information handout, "Getting started in the MCL", explaining the process of registration for an MCL account, is available near the entrance of the MCL.

In some units, the first session in the MCL may be used for registering workgroups. Detailed explanations of workgroups and the procedures for registering will be given in lectures.

Allocated practice and laboratory classes guarantee access to the MCL unless the laboratory happens to be reserved for a special purpose such as a computer-based test. At other times during the day you may also use the laboratory if there is space. Priorities are: (1) students in officially booked classes (2) students doing Maths or Stats course work (3) students doing designated Engineering course work (4) any other students. The resources of the laboratory are finite and in demand and therefore must not be wasted by inappropriate or irresponsible computing such as computer games or the downloading/copying of offensive material. Any such use of the Lab is strictly forbidden. Smoking, eating and drinking are not permitted in the laboratory or anywhere in the building.

The MCL is normally open 8:00 am - 6:00 pm each weekday during semester
and 9:00 am – 5:00 pm each weekday during semester breaks

Conditions of Use: These are set out on the webpage:

<http://www.maths.uwa.edu.au/computing/mcl/conditions>

Mathematics Learning Centre

This is a centre for first year students which will begin operating from week two of the semester. It is located in Tutorial Room 7 (G.15) on the ground floor, and will be staffed by two people at the following times during the semester and also in the week immediately preceding the beginning of the exam period:

Monday to Thursday	1:00 pm – 4:00 pm
Friday	10:00 am – 1:00 pm

Any student enrolled in any first-year mathematics unit may go to the Centre to ask questions about that unit.

4. Assessment

The requirements for assessment in your mathematics unit(s) will be specified in writing during the first week or two of semester and are on the School's web site. Assessment in your unit may consist of a mixture of marked assignments, short tests and formal examinations mentioned above.

Occasionally the particular circumstances affecting individual students may warrant some alteration to the unit assessment requirements for that student. **Authority to allow such variation is delegated by the Head of School to Unit Coordinators, and to no-one else.** If you are affected during the semester or the following examination period by circumstances such as illness or domestic dislocation, then you should consult your unit coordinator and faculty Sub-Dean as soon as possible. Evidence supporting your claim to special consideration must be provided in writing to the Sub-Dean.

If students feel they have been unfairly assessed, they have the right to appeal their mark by submitting an Appeal Against Academic Assessment form to the Head of School and Faculty Office. The form must be submitted within twelve working days of the formal despatch of your unit assessment. It is recommended that students contact the Guild Education Officers to aid them in the appeals process. They can be contacted on +61 8 6488 2295 or education@guild.uwa.edu.au. Full regulations governing appeals procedures are available in the University Handbook, available online at :

<http://www.secretariat.uwa.edu.au/home/policies/appeals>

5. Emergency Procedures and Map

In an emergency, alert any member of staff, or dial 2222 on any internal phone, or telephone 6488 2222 from your mobile phone.

If an evacuation of the Mathematics building is required, the assembly point is the James Oval. **After an evacuation you must not re-enter the building** until permission is given by a Fire Warden or other authorised person.

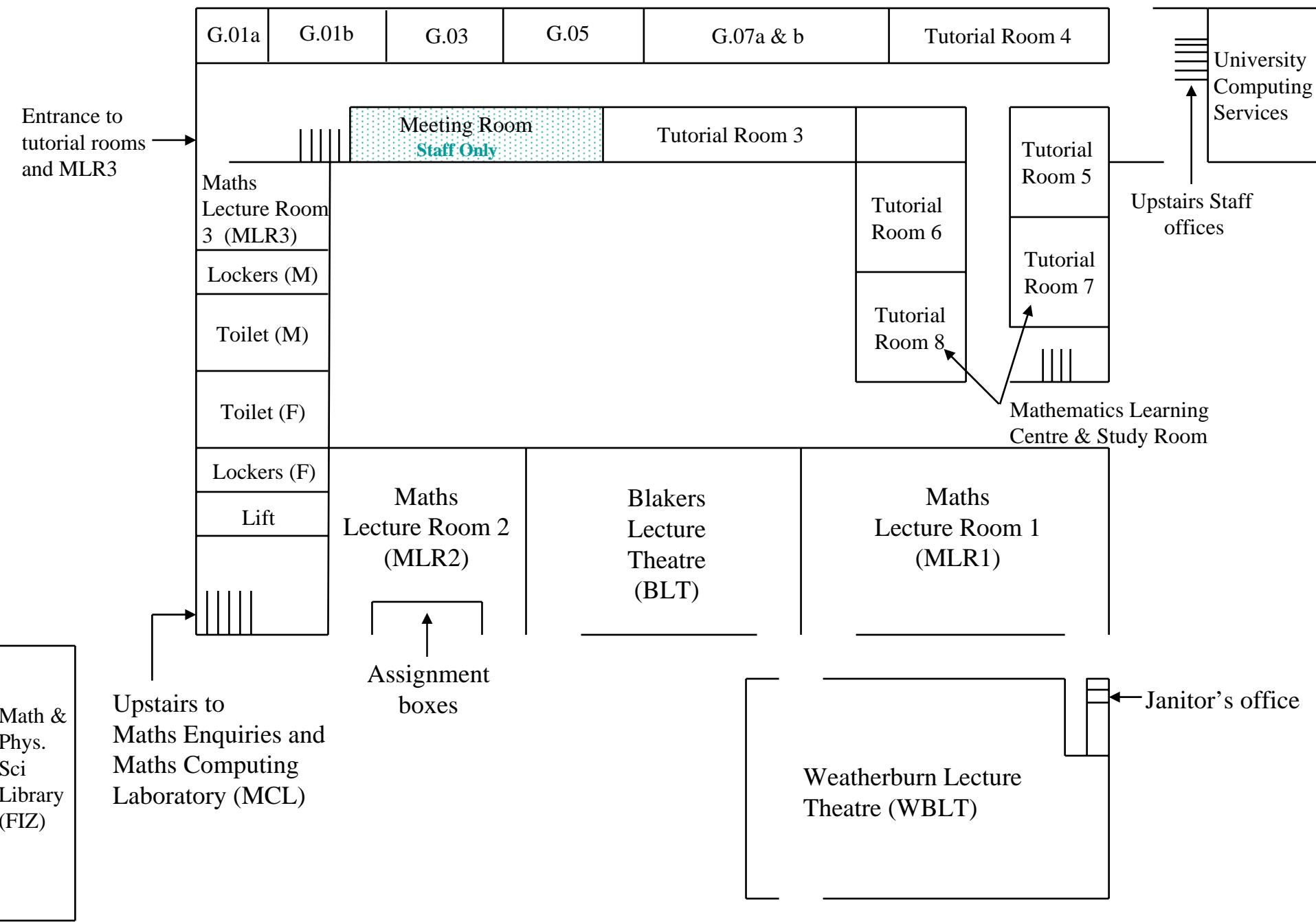
First Aid is available in the Mathematics building either at the Mathematics Enquiries Counter, or by contacting the First Aid officers on extension number 3881 or 3338.

On hearing or raising the alarm your lecturer or tutor or other member of staff will direct you to ;

- **Stand fast** and push chairs, large bags, etc. under desks or benches.
- **Turn off** electrical devices and laboratory operations that are not safe to be left unattended.
- **In controlled sequence, move along gangways to main aisles** and exit in an orderly manner through the nearest appropriate exit. Move quickly but do not run.
- **Move to the Designated Assembly Area (JAMES OVAL).**

This person or persons will **remain** with you at the assembly area until otherwise advised.

No person is to re-enter the buildings until the fire brigade has issued the all clear!!!



Mathematics Building (Ground Floor)