STAT175

GAMBLING, SPORT & MEDICINE

SECOND SEMESTER 2004

UNIT OUTLINE

&

INFORMATION

LECTURERS

The lecturers in this unit are:

Kj Byun   (Weeks 1 – 6 and Week 13)
Room: C5C 369
E-mail: kbyun@efs.mq.edu.au
Tel: 9850 7473

Peter Petocz   (Weeks 7 - 12)
Room: C5C 404
E-mail: ppetocz@efs.mq.edu.au
Tel: 9850 9174

ENQUIRIES

Any questions or queries on the *unit material* should be directed *to statistics staff on office hours at the time*. The lists of times for office hours are shown on the doors of statistics staff on the 4th level of building C5C.

Any enquiries regarding the *administration* of the unit (e.g. practicals, assignments, exams medical certificates etc) should be addressed to the *lecturer in charge* Kj Byun (C5C369, Tel: 9850 7473).

LECTURE THEATRES AND TIMES

For the second semester 2004, the lecture theatre and times are:

Tuesday   *3pm – 6pm*   *W5A Price*

The practical sessions will be held:

Tuesday   *12pm*   *W5A101*

Tuesday   *2pm*   *C5A310*

Wednesday   *11am*   *E5A107*

LECTURES AND PRACTICALS

There will be *three* lectures and *one* practical each week. Practicals will commence in the *second* week of semester. Students should attend the practical they enrolled into during the enrolment period.

Attendance at the practicals is *optional* and will *not* be monitored. However the material covered during practicals is examinable. During the practicals the lecturer will provide the full solutions to the weekly exercises and answer any questions from the audience. These solutions will *not* be available elsewhere and so it is in your best interest to attend.

The standard of these exercises and the setting out of the solution is similar to that required in the examinations.

REFERENCE BOOKS

Gambling and Sport: A Statistical Approach   by John S. Croucher. [QA273.C8555]

The Theory of Gambling and Statistical Logic by Richard A. Epstein [QA271.E67]

Gambling in Australia (edited) by Geoffrey Caldwell et al. [HV6722.A8.G3]

How to take a Chance by Darrell Huff [BC141.H8]

Statistics without Tears by Derek Rowntree (Penguin, 1981)

An Introduction to Medical Statistics by Martin Bland 3rd ed (Oxford UP, 2000)

Reading Statistics by Leigh Wood & Peter Petocz (UTS, 2003)

ASSESSMENT

The assessment for this unit will consist of *two* components:

Three Assignments worth 10% each (30% of the total unit assessment)

- They will be marked and returned during the practical sessions where the solutions will be discussed.

- Late assignments will *not* be accepted for credit without an appropriate medical certificate.

- The assignments are due before 5.00pm on the due date shown in Table below in ERIC (C5C 244). There will be a marked assignment box available in ERIC during that week.

Assignment	Due date	Week
1	24th August	4
2	5th October	8
3	2nd November	12

- The assignments are meant to be a learning device as well as being an assessment task and a reasonable attempt to each question is expected. It is *not* worthwhile to copy the solutions from somebody else. You should ensure however that you take careful note of any solutions provided in the practical session.

- NON-SUBMISSION OF THE ASSIGNMENTS COULD RESULT IN A FAIL GRADE BEING AUTOMATICALLY RECORDED.

A final examination (70% of the total unit assessment)

- Includes material from *all* sections of the unit, including *Gambling, Sport* and *Medicine*.

- Students are *able to bring in one sheet (written on both sides) of handwritten notes into the final exam.*

- Note that, in order to pass the unit, a satisfactory performance is expected in the final exam, irrespective of your performance in the other components.

CALCULATORS

You will be able to use a calculator in any examination in this unit. Function keys should include a *standard deviation* button along with buttons for calculating *ln* and e^x.

UNIT WEB PAGES

The URL for general information on STAT175 is:

http://www.stat.mq.edu.au/units/units.htm

Then select STAT175 in the list of units.

On this Web site students can get information on the aims of this unit, lecture schedule, assessment, mid-term exam, assignment and contact details for the lecturers

There is another Web site used for this unit as well. This Web site is currently under construction and may be incomplete in sections. The URL of this Web site is:

http://online.mq.edu.au/STAT175/

and is case sensitive.

You will be prompted for a **Username** and **Password**. If you are new to Macquarie in 2004, these will have been previously provided to you in a letter. If you were enrolled prior to 2004, use those provided to you when you first enrolled.

If you have any questions about usernames or passwords, contact either the *Library Information Technology Customer Support Desk* (ITCSD) or the *Office of Computing Services (OCS) Operations/Helpdesk.*
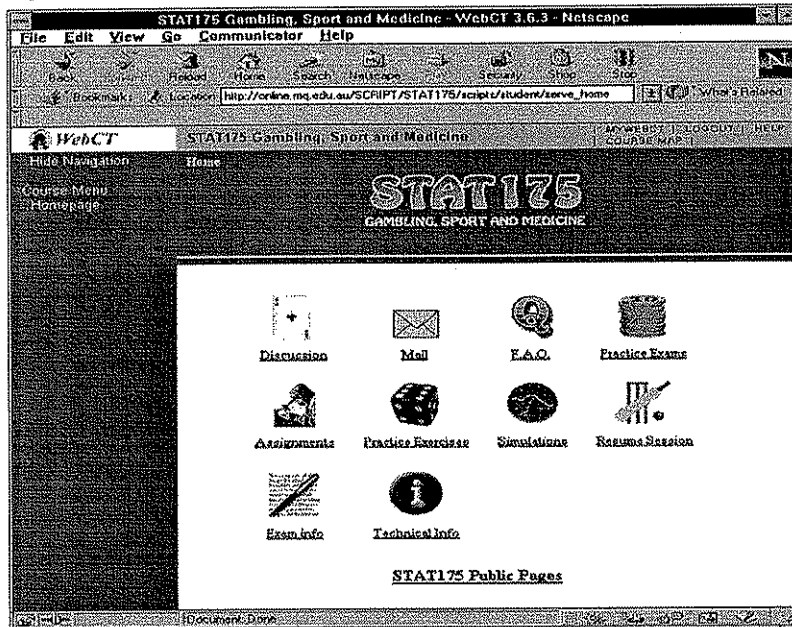
Note that if you change your password at one MUOTF website then it changes at all MUOTF websites to which you have access. When you have finished

using the web site you must exit or quit the browser or else others can use your account to send mail, bulletins etc in your name.

The Web site will be discussed during the practical sessions and you will have the opportunity to ask questions at these times.

You are expected to log on to this Web site at regular intervals (at least once each week) for any up-to-date information regarding the unit. If you experience any difficulties accessing the Web site please contact the unit administrator or ask at one of the practical sessions.

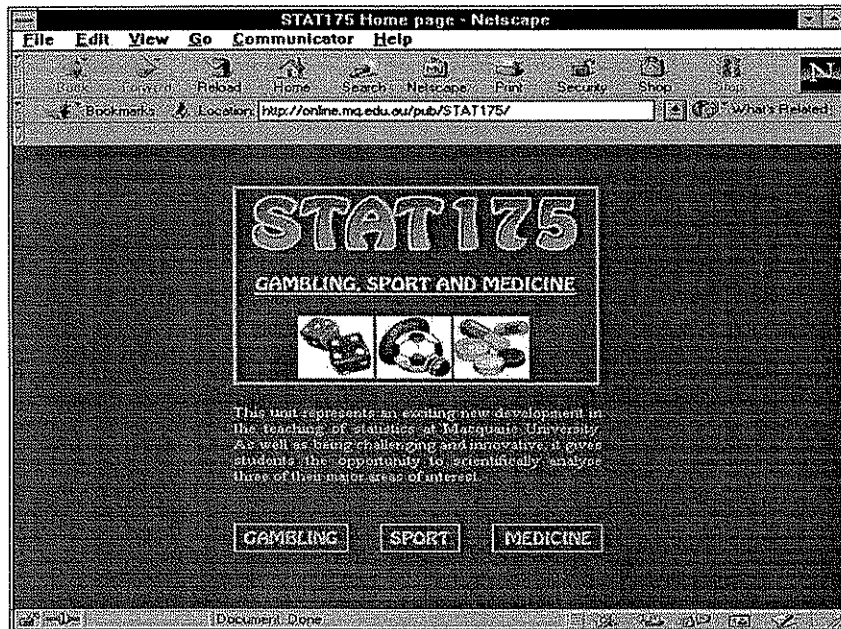After you login, the following screen appears:

If you have any queries about the unit then you may find the answer by selecting the F.A.Q. section of the web site. The F.A.Q. section is regularly updated.

If you wish to post general items for discussion among your fellow students then click on Discussion and follow the instructions.
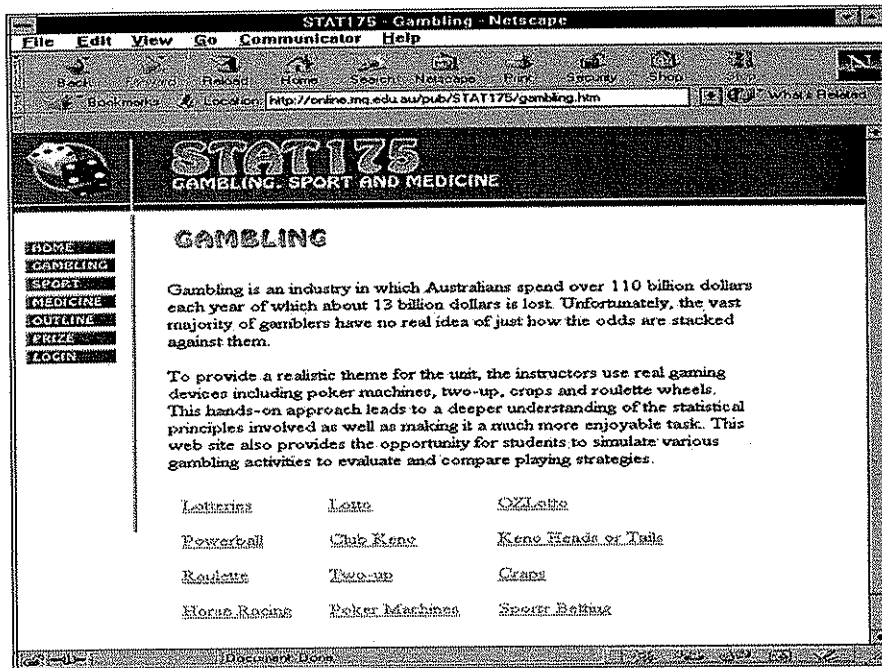
NOTE: You may be asked to download *Shockwave* at some point if you don't already have it loaded. This is because the simulations on the Web site make use of its audio and graphics capabilities. Also, the website does *not* work well

with the browser *Internet Explorer* and may give errors. In this case you may have to use the browser *Netscape Communicator*.

Once you have logged into the above URL and selected the option "**STAT175 Public Pages**" the following screen will appear.
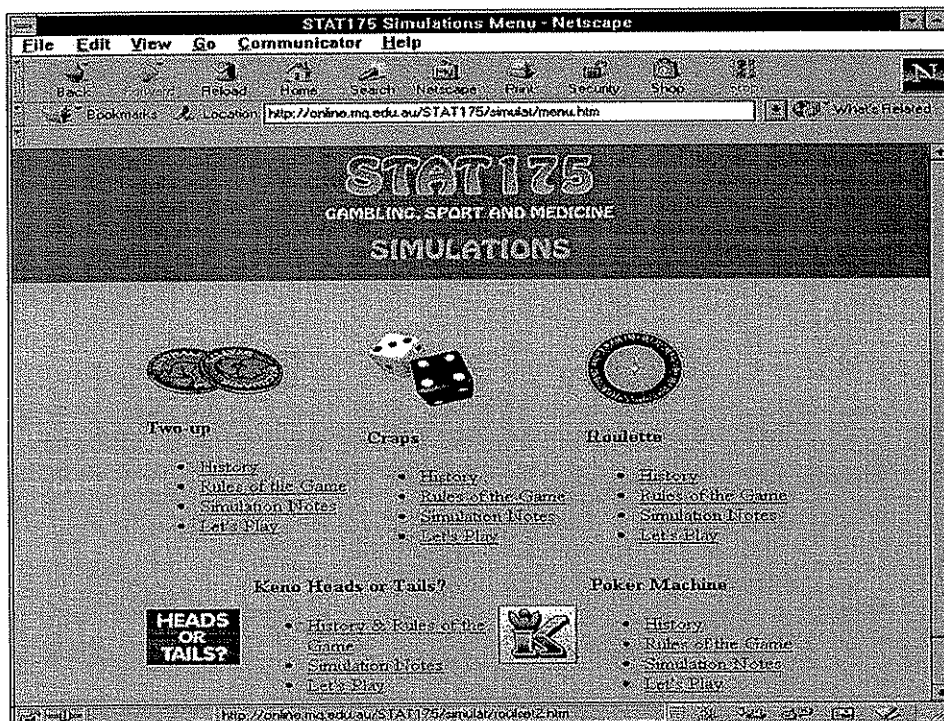

Once the above screen appears then you can click on either the GAMBLING, SPORT or MEDICINE icons. These will provide information about various topics in the unit. If, for example, you selected GAMBLING, then the following screen will appear.

You may click on any of the icons on the above screen. They are generally self-explanatory.

If you click on Simulation on the screen on the previous page, you will see the following screen. You can then choose the simulation that you would like to run.

PANTHERS PRIZE

In each of the two offerings of STAT175 each year there is a prize of $250 to the most outstanding student.

These prizes have been kindly donated by Panther's World of Entertainment located at Penrith and will be presented at the Division's award ceremony evening at the beginning of the following year.

SPECIAL CONSIDERATION

All requests for special consideration in this unit must be made on the appropriate form or it will *not* be accepted. In the case of illness this requires completion of the *Professional Authority Form*. This form is available on the web at the following URL.

http://www.reg.mq.edu.au/Forms/APSCons.pdf

There is also a copy at the end of this handout. Note that this form *must* be accompanied by full supporting documentation. In any event, special consideration will NOT be granted if your coursework has been unsatisfactory.

LECTURE SCHEDULE (D2 2004)

WEEK NO.	LECTURE DATE	ASSIGNMENTS DUE	TOPICS
1	3 August		Introduction
2	10 August		Forecasting Olympic Performances
3	17 August		World Cup Soccer
4	24 August	**Assignment 1**	Drug use and testing in Sport
5	31 August		Sports Betting
6	7 September		Casino Games
7	14 September		Lotteries and Life
Mid Semester Break			
8	5 October	**Assignment 2**	Statistics in medicine
9	12 October		Graphical methods
10	19 October		Diagnostic tests
11	26 October		Evaluating statistical evidence
12	2 November	**Assignment 3**	Forensic Science
13	9 November		**Revision**

Notes:
The assignments are due by 5pm on the day of lecture (Tuesday) in weeks 4, 8, 12.