STA250F Statistical Concepts - Summer 1998

Location: SS2118
Time: MW 7 - 10 pm
Instructor: Yun(Grace) Yi
Email: yunyi@utstat.toronto.edu
Office Hours: MW 5 - 6 pm in SS6015

Texts:

Introduction to the Practice of Statistics, by Moore and McCabe,
and the accompanying *Minitab Guide*.

Evaluation:

- **10% - Tutorial Grade** - Based on quizzes to be completed in tutorial, and participation

- **20% - Test # 1** - To be held in tutorial on **Wednesday, May 27** and will cover material from the first four lectures

- **20% - Test # 2** - To be held in tutorial on **Wednesday, June 10** and will cover material from the first eight lectures, emphasizing the material covered since Test #1

- **50% - Final Exam** - Held during the exam period and will cover the entire course

Note:

- For each test a one-sided $8 \frac{1}{2} \times 11$ aid sheet will be permitted. For the final exam two one-sided $8 \frac{1}{2} \times 11$ aid sheets will be permitted. Non-programmable calculators are allowed.

- There will be no make-up tests or quizzes. If a test is missed and proper documents is produced, then the weight of the test will be shifted to the final exam. Otherwise, a mark of zero will be assigned for the test.

Tutorials:

There is one hour tutorial before each lecture starting May 13. There will be a quiz in every tutorial. You have been assigned a tutorial location. Your tutor will have office hours (MW5-6pm) in Stat Aid Center, SS2133.

Last name beginning with **A - M: ES142**
Last name beginning with **N - Z: WI524**

Computing:

Analyzing data using statistical software is an essential component of this course. Students will be provided with an account on the **CQUEST** system. We will be using **MINITAB** software, which is also available in a student version for home computers.

Course Content:

We will cover the material in the textbook. The course is based on the lectures, which will supplement the material given in the book.

<u>Outline</u> <u>Regression</u> <u>May/June-1998</u>

<u>Instructor</u>: Philip McDunnough,office=SS6013,phone=978-4327
e-mail=philip@utstat.toronto.edu

<u>Assistant</u>: Victor Zurkowski ,e-mail=victor@utstat.toronto.edu

<u>Lectures</u>: Tuesday/Thursday 6->9 . Note: 1st hour involves some
review,computer data analysis using SAS and/or S+ ,
assignments,etc...

<u>Text(required)</u>: Regression Analysis by Sen&Srivastava
(Springer-Verlag)

"<u>Office Hours</u>": By appointment, after lectures, via e-mail
Important: All students will have computer accounts and
communication via e-mail with PMcD and VZ is
strongly encouraged.

<u>Marking</u>: Test 1 on Thursday May 28th from 6->8:30-25%
(Test 1 returned in class on June 4th-drop date 5th)
Test 2 on Thursday June 11 from 6->8:30-30%/55%
(Test 2 returned in class on June 18th)
(The room(s) for the test will be announced shortly.)
3 assignments worth 45%.1st out May 21->in May 28,2nd out
June 2->in June 9,3rd out June 9->in June 18. Tests handed in at the
beginning of the lecture @6:10 .

<u>Note</u>: There are *no makeup tests*. Tests will be based mainly on the
theoretical material covered in the 7-9 lecture hours. The
assignments will cover both theoretical and computer/data
problems.

<u>Topics to be covered</u>: Review of basic statistical methods; matrices
and vectors (Appendix A); random vectors, distributions and such
(Appendix B); fittings a straight line (Chapter 1); multiple
regression (Chapter 2); tests and confidence regions (Chapter 3-not
the starred sections);some discussion of indicator variables
(Chapter 4);the normality assumption (5.1,5.2 and possibly 5.3);
unequal variances (some of Chapter 6);outliers,multicollinearity and
variable selection (some of Chapters 8,10 and 11). <u>Note:</u> *The extent
of the coverage may vary.*