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 1/2 x 11 aid sheet will be permitted. For the final exam two one-sided 8 1/2 x 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.
Outline

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

**Assistant:** Victor Zurkowski, e-mail=victor@utstat.toronto.edu

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

**Text (required):** Regression Analysis by Sen & Srivastava
(Springer-Verlag)

**Office Hours:** 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.

**Marking:** 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.

**Note:** 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.

**Topics to be covered:** 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). **Note:** The extent
of the coverage may vary.