Mthsc 405/405H/605 Statistical Methods II (Sec. 2) 11.00-12.15 T,TR, Martin E1

Dr. K.B. Kulasekera
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Office Hrs: 3.15-4.15 pm T,TR and 1.30-2.00 MWF or by appt.
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Prerequisites: Mthsc 301(2) or equivalent

Text: Linear Statistical Models; An Applied Approach by Bowerman and O'Connel.

This course is designed to provide you with a good understanding of a few regression modelling techniques. The methods discussed here can be applied in a variety of areas such as engineering, health sciences and management. You will be introduced to at least two computer packages (SAS and Statistix) that can be used for various calculations.

Syllabus

1. Quick Review of Confidence Intervals and Tests of Hypotheses
2. The Simple Linear Regression (Chapters 4& 5)
3. Diagnostics (Chapter 6)
4. Multiple Linear Regression (Chapters 8 and 9)
5. Diagnostics and Model Building (Chapters 10 and 11)
6. Indicator Variables and ANOVA(Chapters 12 and 14)

Grading:

Class Project..10%
In Class tests(3)... 60%
Final Exam..30%

Grades: $\geq 90\%$ -A;$[80, 90)\%$ -B;$[70 - 80)\%$-C.

1. You may expect a test every four weeks, first being around Sep. 19th. All exams are closed book. If tables are needed, they will be provided. You will need a calculator for the tests and the Final.

2. Lowest exam score will be replaced by 50% of the final exam score, if it helps. There will be no makeup exams. If you miss one, that will be the worst score to be replaced. You are responsible for material covered whether or not you are present.

3. **No late projects**. You have to find a data set within the first four weeks of classes and get it approved. I will ask for updated reports during the semester and they must be submitted in a timely manner. Failure to do so once will result in a 50% reduction from the allocated 10% and twice will make it a 100% reduction (i.e. zero contribution towards the course grade). Final exam is comprehensive and mandatory.

4. All drop/add procedures are the responsibility of individual student.

5. Home work will be assigned regularly. These problems are expected to be solved in a timely manner (before the next class period).

6. Students in 405H and 605 will be assigned some extra reading material. They are required to complete their reading assignments and work a few hw problems independently in a timely manner. In all the tests they are required to answer additional questions (one or two) which will be based on the reading material.

7. If I am more than 15 minutes late, the class is considered cancelled.

8. Academic dishonesty will not be tolerated and handled as described in the student handbook