

**ISyE 6414, Statistical Modeling and Regression Analysis  
Summer 2008**

**Instructor:** Dr. J.-C. Lu

**E-mail:** [JCLU@isye.gatech.edu](mailto:JCLU@isye.gatech.edu)    **Webpage:** [www.isye.gatech.edu/~jclu](http://www.isye.gatech.edu/~jclu)

**Office Hours:** TBA

**Textbook:** *Applied Linear Statistical Models* by Kutner, Nachtsheim, Neter and Li (5<sup>th</sup> edition)

**Grade Distribution:** Homework 20%, Exam #1: 25%, Exam #2: 25%,  
Exam #3: 30%

**Exam Dates:** TBA

**Course Outlines:**

| <u>Topic</u>  | <u>Chapters</u> |
|---|-----------------|
| 1. Review of Basic Statistics                         | Appendix A      |
| 2. Simple Linear Regression                           | 1 to 4          |
| 3. Multiple Linear Regression                         | 6 & 7           |
| 4. Building Regression Models                         | 8 to 11         |
| 5. Generalized Linear Model                           | 14              |
| 6. One-factor & Multi-factor ANOVA                    | 16 to 24        |
| 7. Randomization & DOE                                | 26 to 28        |
| 8. Two-level Full and Fractional Factorial<br>Designs | 31              |