MATH-4803/5803 ANALYSIS OF VARIANCE

Instructor  Dr. Chulmin Kim (Boyd 326)
Phone & Email 678-839-4142  ckim@westga.edu  The ONLY email accepted
Lecture  TR 12.30-1.45 pm (Boyd 306)
Office hours  TR 8.00-9.00 am (Boyd 326) 9.00-9.30 am (Boyd 205) & Appts.

Course Objectives

This course involves a thorough examination of the analysis of variance statistical method including hypotheses tests, interval estimation, and multiple comparison techniques of both single-factor and two-factor models. Extensive use of a statistical computer package, Minitab, will be a necessary part of the course.

Suggested Text (optional)

- A: Regression Analysis, 7th Ed., by William Mendenhall and Terry Sincich
- B: Applied Linear Statistical Models, 5th Ed., by Kutner, Nachtsheim, Neter and Li

Coverage, HW Assignments and Exams

- Week 1 (Aug 15) Regression Review I (A: Ch1)
- Week 2 (Aug 20 & Aug 22) Regression Review II (A: Ch3) & Minitab
- Week 3 (Aug 27 & Aug 29) Single Factor Studies I (B: Ch16)
- Week 4 (Sep 3 & Sep 5) Single Factor Studies II (B: Ch16)
- Week 5 (Sep 10 & Sep 12) Single Factor Studies III (B: Ch16)
- **Week 6 (Sep 17) HW1 (Sep 19) EX1 (Regression Review & Single Factor Studies)**
- Week 7 (Sep 24 & Sep 26) Analysis of Factor Level Means (B: Ch17)
- Week 8 (Oct 1) ANOVA Diagnostics & Remedial Measure (B: Ch18) **(Oct 3) No class**
- Week 9 (Oct 8 & Oct 10) Two Factor Studies I (B: Ch19)
- Week 10 (Oct 15 & Oct 17) Two Factor Studies II (B: Ch19)
- Week 11 (Oct 22 & Oct 24) Two Factor Studies III (B: Ch19)
- **Week 12 (Oct 29) HW2 (Oct 31) EX2 (Analysis of Factor Level Means, ANOVA Diagnostics and Remedial Measures Regression Review & Double Factor Studies)**
- Week 13 (Nov 5 & Nov 7) Randomized Complete Block Design (B: Ch21)
- Week 14 (Nov 12 & Nov 14) Random and Mixed Effects Model I (B: Ch25)
- Week 15 (Nov 19 & Nov 21) Random and Mixed Effects Model II (B: Ch25)
- Week 16 (Nov 26 & Nov 28) No class
- **Week 17 (Dec 3) HW3 (Dec 5) EX3 (Analysis of Factor Level Means, ANOVA Diagnostics and Remedial Measures Regression Review & Double Factor Studies)**
- **Week 18 (Dec 12) 11 am-1 pm Final (Comprehensive)**

You can discuss HW however you have to use your own words. To fail this will result 0.

Exams are open book with calculator. I expect you spend at least more than 5 hours per week.

Point allocation: HW 3x20=60, EX1=100, EX2=100, EX 3=100, F=140
You get an A if total>=450, B if total>=400, C if total>=350, D if total>=300. F, otherwise.
And the deadline for the “W” is Oct. 9.