STAT 502 WD - Analysis of Variance and Design of Experiments – Spring 2016

Tentative Course Schedule - Subject to change!

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| **Week** | **Beginning Monday** | **Text Readings** | **Topics** | **Homework and Exams Due in Drop Box by 12:00 Midnight EST on:** |
| 1 | 1/11 | 15.1 | Getting Started - Course Materials  Hypothesis Testing  Research Design Principles  Intro to SAS programming | 1/19 HW1 |
| 2 | 1/18 | Sections 16.5-16.6; 17.1; 17.2; 17.5 | ANOVA Computations  Treatment Comparisons / Contrasts  Graphs | 1/26 HW2 |
| 3 | 1/25 | 16.1-16.4; 16.7 | Development of ANOVA model (Equation 16.62)  Software Applications | 2/2 HW3 |
| 4 | 2/1 | 19.1-19.9; 24.1-24.5; 26.1-26.3 | Multi-factor Designs: Factorial, Nested, and cross-nested treatment designs | 2/9 HW4 |
| 5 | 2/8 | (Review)  **Exam1** | Exam 1 opens on Thursday 2/11  Covers Lesson 1-5 | No HW HAssignment (Review)  **2/16 Exam 1 Due** |
| 6 | 2/15 | 25.1-25.4 | Random effects  Mixed Models | 2/23 HW5 |
| 7 | 2/22 | 25.5-25.6; 28.3-28.6 | Intro to ‘Experimental design’  Completely Randomized Design (CRD)  Randomized Complete Block Design  (RCBD)  Latin Square design | 3/1 HW6 |
| 8 | 2/29 | 27.6 | Split-Plot Designs | 3/15 HW 7 |
| 9 | 3/7 |  | **Spring Break** |  |
| 10 | 3/14 | (Review)  **Exam 2** | Exam 2 Opens on Thursday 3/17  Covers Lesson 6-9 | **3/22 Exam 2 Due** |
| 11 | 3/21 | 22.1-22.5 | Analysis of Covariance (ANCOVA I) | 3/29 HW8 |
| 12 | 3/28 | Sections 16.8; 17.9 | ANCOVA (II) The General Linear Model and Quantitative Factor Levels | 4/5 HW9 |
| 13 | 4/4 | No Text reading | Repeated Measures | 4/12 HW10 |
| 14 | 4/11 | No Text reading | Cross-over Designs | 4/19 HW11 |
| 15 | 4/18 | Lesson 14 (Review) | Review and Project Discussions | No Assignment Due |
| 16 | 4/25 |  | **Final Exam**  **Proctored 3hr open book**  Available from 4/28 through 5/3 | **4/29**  **Projects Due** |