Syllabus math 7641
ANOVA
SPRING 2015

INSTRUCTOR: Dr. D Bowman (Armstrong)
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TEXTBOOK: Beyond ANOVA by Rupert Miller
TOPICS COVERED:

One sample Normal Theory, nonnormality effects, detection and correction, dependence – effect detection.

Two sample Normal Theory, Independence and paired samples, nonnormality – effects, detection and correction, unequal variances – effects, detection and correction, dependence.

One way ANOVA – fixed effects Normal Theory, multiple comparisons, monotone alternatives, nonnormality – effect, detection and correction, unequal variances, - effect, detection, correction. Random effects Normal Theory – variance estimation, mean estimation, nonormality – effect, detection, correction, equal variance, dependence, Bayesian modeling.

Two way ANOVA Fixed effects, Random effects, Mixed effects, balanced and unbalanced designs, multiple comparison, monotone alternatives, non-normality, unequal variances, dependence.

EVALUATION: There will be a midterm and a final examination. Each test will count for $1/3^{rd}$ of the grade. In addition there will be homework assignments which will count collectively for the remaining third of the grade. The student's final grade in the course will be determined by the percentage of the total possible points received.

The professor reserves the right to make any necessary changes to the information provided in the syllabus during the semester.