## Experimental Psychology – Arlo Clark-Foos **Study Guide for Exam #3**

## **Understanding Statistics: Description and Correlation**

- Bar Graph
- Pie Chart
- Statistical Significance
- Central Tendency
- Mean
- Median
- Mode
- Variability
- Range
- Variance
- Standard Deviation
- Correlation Coefficient
- Pearson Product-Moment Correlation Coefficient
- Regression
- Descriptive Statistics
- Inferential Statistics
- Effect Size
- Frequency Distribution
- Frequency Polygons
- Multiple Correlation
- Partial Correlation
- Scales of Measurement: Nominal, Ordinal, Interval, Ratio
- Path Analysis

## **Understanding Statistics: Inferential Statistics**

- Inferential Statistics
- t test
- F test
- Analysis of Variance
- Degrees of Freedom
- Systematic Variance
- Error Variance
- Null Hypothesis
- Research Hypothesis
- Power
- Probability
- Statistical Significance
- Type I Error
- Type II Error

## **Generalizing Results**

- Importance of Replication
- Exact Replication
- Conceptual Replication
- External Validity
- Meta-Analysis

<sup>\*</sup> This study guide is a rough outline and may be updated before the study review session

<sup>\*\*</sup> Updated 11/12/2010