# Master Syllabus STA 3163L Intermediate Statistics Laboratory Department of Psychology

Florida Atlantic University, Boca Raton, FL

# Course Prerequisites and/or Corequisites (if any)

PSY 1012 General Psychology PSY3234 Experimental Design and Statistical Inference

#### **Course Lecture-Lab-Credit and/or Contact Hours**

Lab Course, 1 credit hour Gordon Rule course for *computational skills* 

Includes Lab? <u>X</u> Yes No

Lab Fee? \_\_\_\_Yes \_X\_\_No

#### **Special Facility or Equipment Needs**

Computer lab equipped with SPSS required; textbooks and other student materials to be specified by instructor.

#### **Recommendations for Teaching Assistants**

No TAs are utilized for this course.

#### **Course Objectives**

To be provided by working group.

#### **Course Outline of Topics (Sequence & specifics may vary by instructor)**

- I. Data entry and labeling of variables
- II. Data management, such as forming composite variables
- III. Central tendency and variability
- IV. Frequency distribution and graphical presentation of data
- V. Independent sample t-test
- VI. Dependent sample t-test
- VII. One-way independent sample ANOVA
- VIII. One-way dependent-sample ANOVA
- IX. Two-way ANOVA using between participant independent variables
- X. Correlation and simple regression
- XI. Non-parametric statistics, including at least one chi-square test

## **Course Learning Objectives**

Students will demonstrate an understanding of the following concepts through their performance on course projects:

- 1. Use SPSS statistical package
- 2. Enter data properly into database
- 3. Select, plan, and conduct appropriate statistical analyses on sets of data using SPSS

A final course project will be completed in which students will demonstrate their ability to:

- 1. Conduct the appropriate statistical analyses on a set of data (including at least one inferential statistical analysis)
- 2. Communicate the scientific conclusions that may be drawn from appropriate statistical analyses in:
  - a. Written form following APA style
  - b. Tabular form following APA style
  - c. Graphical form following APA style

## **Rubric for Grading Research Papers**

The grading of the final project will be based 50% on the inferential component and 50% on the descriptive component.

The grading rubric is to be created by the working group for this course.