



# PSY 3605

## Psychology Statistics Lab

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Spring Semester 2012

**Instructor:** Joshua D. Marquit, Ph.D.

**Course Location:** Room 325, Social and Behavioral Science Building, WSU – Ogden Campus

**Course Time:** Thursday, 11:30 to 1:00pm

**Email:** joshuamarquit@mail.weber.edu

**Office/Cell Phone:** (435) 757-7023; I'm available by phone from 9am until 10pm each weekday

**Office:** Room 325, Social and Behavioral Science Building

**Office Hours:** Tuesday, 1 to 3pm and Thursday, 2 to 4pm or by appointment

**Contact Policy:** I am accessible to my students by email, phone, and through Canvas. When sending emails, please use my WSU Gmail account (joshuamarquit@mail.weber.edu).

### Required Reading Materials

- Salkind, N.J. & Green, S. (2011). *SPSS QuickStarts with SPSS Student Version 18.0*. Upper Saddle River, NJ: Pearson.
  - ISBN-13: 978-02050-2178-9

### Course Description and Content:

This course is designed to introduce students to the data management and analysis program, SPSS. Specifically, this course will cover a broad range statistical functions in SPSS including menu and toolbar usage, creating data files and variables, data transformation and management techniques, creating graphs and tables, and conducting descriptive statistics and basic inferential statistics.

### Course Objectives:

There are seven key learning objectives for this course. All class activities (e.g. readings, lectures, labs, etc.) are designed to help students meet, and/or assess their progress on, these objectives. In this class, students will:

1. Demonstrate the ability to manage data in SPSS.
2. Demonstrate the ability to conduct some descriptive and inferential statistics in SPSS.
3. Demonstrate the ability to identify appropriate statistical procedures for basic research questions.
4. Demonstrate the ability to construct and interpret graphical representations of data in SPSS.
5. Learn how to interpret statistical analysis and corresponding output in SPSS.
6. Learn how to report and summarize various statistical analyses in APA formatting style.
7. Learn how to interpret the statistical analysis used in psychological science.

### Course Structure:

This course is a lecture course, and students will be expected to demonstrate their learning through class readings and preparation, participation in course discussion, and lab assignments. The purpose of class lectures is to elaborate on material presented in the textbook, demonstrate and conduct data analysis in SPSS, complete your lab assignments, and to provide a forum for discussion.

**Weekly Readings:**

SPSS QuickStarts by Salkind and Green is required reading. Reading assignments will be assigned each week and are to be completed prior to the beginning of the following class period.

**Grading and Evaluation:**

There are 400 points possible in this course. Your grade for this course will be calculated from several areas, as detailed below.

Percentage	Grade
93 - 100	A
90 - 92.99	A-
87 - 89.99	B+
83 - 86.99	B
80 - 82.99	B-
77 - 79.99	C+
73 - 76.99	C
70 - 72.99	C-
67 - 69.99	D+
63 - 66.99	D
0 - 62.99	E

Evaluation Activity	Due Date	Point Total
<b>Attendance and Participation</b>		<b>75</b>
<b>Lab Assignment</b>		
Lab #1: Creating and Manipulating SPSS Data Files	Thursday, 1/19	25
Lab #2: Graphical Representations of SPSS Data	Thursday, 1/26	25
Lab #3: Z-scores and other Transformations	Thursday, 2/2	25
Lab #4: Descriptive Statistics	Thursday, 2/9	25
Lab #5: t-Test Procedures	Thursday, 2/16	25
Lab #6: One-Way ANOVAs	Thursday, 2/23	25
Lab #7: Repeated-Measures ANOVAs	Thursday, 3/1	25
Lab #8: Two-Way ANOVAs	Thursday, 3/8	25
Lab #9: Correlation	Thursday, 3/22	25
Lab #10: Linear Regression	Thursday, 3/29	25
Lab #11: Multiple Regression	Thursday, 4/5	25
Lab #12: Item Analysis	Thursday, 4/12	25
Lab #13: Nonparametric Statistics	Thursday, 4/19	25
<b>Total Points</b>		<b>400</b>

**Class Attendance:**

Class attendance, participation, and discussion are essential to perform well in this course. I will be conducting demonstrations in class to help you learn the course material and complete your lab assignments. For this reason, I will be taking attendance at each class session. Class attendance and participation will be worth a total of 75 points (or approximately 19% of your grade). For those of you that have perfect attendance, I will give you an additional 10 points.

**Lab Assignments:**

The Lab Assignments are designed to give students the opportunity to learn, build, apply, and demonstrate their skill with SPSS. Throughout the semester, students will participate in 13 Lab Assignments, each worth 25 points. Each Lab Assignment is due at the beginning of class and should include your SPSS output and the results of your data analysis written in APA format.

**Late Lab Assignments:**

Late Lab Assignments will receive an immediate 5-point deduction with an additional 5-point deduction for each additional day late.

In the event of a University-approved absence or a medical problem, please contact the instructor as soon as possible. In general, advance notice and/or appropriate documentation will be required to reschedule the due date of a lab assignment. Appropriate documentation may include written notification from a treatment provider.

**Students with Disabilities:**

Qualified students with disabilities may be eligible for reasonable accommodations. If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Services for Students with Disabilities (Davis Campus - Room 221, 801-395-3524 or Ogden Campus - Student Services Center, Room 181, 801-626-6413), preferably during the first week of the course. Any request for special consideration relating to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Services for Students with Disabilities, course materials can be provided in alternative format, large print, audio, diskette, or Braille.

**Academic Integrity and Honesty:**

Plagiarizing, cheating, or violating other reasonable standards of behavior will not be tolerated. Any student who engages in academically dishonest behavior will receive an "E" for the course grade. All incidents of cheating will be reported for university-level disciplinary proceedings the results of which can include probation, suspension, expulsion, the assignment of HV (honors violation) to the students permanent transcript, etc.

**Changes in Assignments and Schedule:**

The instructor reserves the right to make changes to this syllabus at any time. Changes will be announced in class and posted on Canvas.

**Tentative Course Schedule:**

Month	Date	Class Session	Readings	Lab Assignment Due Dates
Jan.	5	Introduction; Syllabus Review; SPSS Basics		
Jan.	12	Creating an SPSS Data File; Working with an SPSS Data File	pp. 8-41	Lab #1: Creating and Manipulating SPSS Data Files is due in class on 1/19.
Jan.	19	Creating and Editing SPSS Graphs and Tables	pp. 42-57	Lab #2: Graphical Representations of SPSS Data is due in class on 1/26.
Jan.	26	Z-scores and other Transformations		Lab #3: Z-scores and other Transformations is due in class on 2/2.
Feb.	2	Descriptive Statistics	pp. 58-65	Lab #4: Descriptive Statistics is due in class on 2/9.
Feb.	9	Evaluating Means, Part 1: t-Test Procedures	pp. 66-75	Lab #5: t-Test Procedures is due in class on 2/16.
Feb.	16	Evaluating Means, Part 2: One-Way ANOVAs	pp. 76-79	Lab #6: One-Way ANOVAs is due in class on 2/23.
Feb.	23	Evaluating Means, Part 3: Repeated-Measures ANOVAs	pp. 80-83	Lab #7: Repeated-Measures ANOVAs is due in class on 3/1.
March	1	Evaluating Means, Part 4: Two-Way ANOVAs	pp. 84-91	Lab #8: Two-Way ANOVAs is due in class on 3/8.
March	8	Correlation	pp. 92-99	Lab #9: Correlation is due in class on 3/22.
March	15	Spring Break – No Class		
March	22	Regression, Part 1: Linear Regression	pp. 100-3	Lab #10: Linear Regression is due in class on 3/29.
March	29	Regression, Part 2: Multiple Regression	pp. 104-8	Lab #11: Multiple Regression is due in class on 4/5.
April	5	Item Analysis	pp. 108-21	Lab #12: Item Analysis is due in class on 4/12.
April	12	Nonparametric Statistics	pp. 122-32	Lab #13: Nonparametric Statistics is due in class on 4/19.
April	19	Finals Week		