

## Quantitative Psychology

PSY 632 (Section: 0593) • 5:30pm-8:30pm M – Spring 2017

Instructor: Dr. Candace Lapan	Email: CLapan@fmarion.edu
Office: CEMC 109E	Office Hours: Mondays 4:30-5:30pm

### Contact Information

- Drop-in hour: Monday 4:30-5:30pm are reserved for drop-in visits by members of this class. No appointments, no need to ask, no need to tell me you're coming, & first-come first-served. *If you cannot make this time, please e-mail me several days and times of availability to schedule an appointment. If you do not send me your availability, I will send you an e-mail asking for this information, so save yourself the time and include it when you contact me for an appointment.*
- If you feel you are underperforming in the course and you are not sure why, please come see me EARLY in the semester and as often as you need to. Your success in this course is my top priority and I would love to help in any way I can.
- I do not discuss grade-related issues over email. Please set up a time to speak with me in person

### **Course Description:**

This class focuses on the basic statistical techniques used in social science research. Students will be introduced to statistical techniques including: *t* tests (independent & dependent samples), Analysis of variance, correlation, and regression. Students are expected to take the material/concepts presented in class and apply them through a series of homework assignments and quizzes. The overall goal of the course is not only to help students understand the mathematical/statistical concepts presented but also to assist in the application of these procedures. Thus, much of our time will be spent working with SPSS.

### **Course Goals:**

- Introduce statistical concepts utilized in research within the social sciences
- Apply the mathematical/statistical techniques presented for social science research
- Demonstrate an ability to analyze and interpret data within the social sciences
- Provide practical examples as to when statistical techniques presented are appropriate methods for analysis.
- Learn to use SPSS to conduct statistical analyses
- Interpret and understand statistical analyses reported in psychological journals

### **Text & Required Materials**

Warner R. (2013). Applied Statistics: From Bivariate Through Multivariate Techniques. 2<sup>nd</sup> Edition.

### **Attendance**

Class attendance is required. I will not take attendance in class, however much of the course material will be taught in class only. Further, because our class only meets once a week, missing one class will result in a large amount of missed material. Thus, it is imperative that you attend each class. If you have extenuating circumstance that cause you to miss multiple classes, I suggest meeting with me as soon as possible so that we can discuss your options.

If you miss class, you are responsible for obtaining notes from another student. I do not provide my personal lecture slides or notes to students. I am always available to meet with you in person outside of class to explain concepts you are still having trouble with **after** you obtain the notes and announcements from other students.

## **Blackboard**

All course documents can be found on Blackboard, including the syllabus, and lecture outlines. I will post lecture outlines prior to our meetings. Note that these outlines are *frameworks* for lectures – they will only contain a *fraction* of what I discuss in class and they will be intentionally incomplete. This is done purposely to encourage you to maintain an active learning approach by taking notes on the visual and verbal presentation throughout the lecture. *You are encouraged to print out a copy of these outlines and bring them to class so that the note-taking procedure is less burdensome.*

Homework will also be completed via Blackboard. Grades will be posted on Blackboard. For help logging into blackboard, contact the Help Desk (661-1111). Students are automatically enrolled in this course on Blackboard. To access Blackboard go to: <https://blackboard.fmarion.edu/>

Note that the BB site is intended to supplement in-class learning and that it *never* serves as a substitute for class attendance. As a university student, it is your responsibility to be aware of all announcements/material covered in class. Occasionally, I will send e-mails to the class from the BB website. Note that all e-mail goes to your FMU account; therefore, you are responsible for checking this account daily.

## **Grading Policies:**

Midterm Exam	30%
Final Exam	30%
Online Quizzes	20%
<u>SPSS Reports</u>	<u>20%</u>

## **Quizzes**

Quizzes will be posted and completed on BB. Each quiz will consist of multiple choice or fill in the blank questions. All quizzes are **on Wednesdays by 11:59pm on the date listed on the syllabus.** You can submit each quiz only once. **Blackboard assignments do not work properly if you use your phone or tablet. You'll have to use a computer.**

To avoid unnecessary problems when you are completing quizzes:

- Be sure to download Adobe Flash to your computer.
- Use a reliable internet connection—not WIFI connections. Do not attempt to complete online work on your phone. If your connection is not reliable, you risk receiving a 0 for the assignment if your connection is lost.
- If you miss the deadline, you will receive a 0 for that quiz. **There will be no make-up quizzes and no extended deadlines.**
- If, however, you encounter a technical problem while completing your quiz on blackboard, **you must email me before the deadline for completion of the assignment,** in which case I will advise you of your options within 24 hours. Note: You will be permitted consideration due to technical problems for no more than two quizzes.

## **SPSS Reports**

A major learning outcome for this course is that you will be able to analyze real data using SPSS. Thus, each week you will be supplied with a data file and will have to conduct various data analyses. You will

then have to provide me with you output files as so that I can ensure that you ran the analyses correctly. These reports will be due **every Thursday by 11:59pm**. You will upload your SPSS output files via blackboard.

### **Exams**

Exams will take place in class and will be a mix of multiple choice and short answer.

### **Academic Honesty**

Academic dishonesty is a serious offense. Any form of dishonest behavior (e.g., cheating, plagiarism, unauthorized assistance), will result in penalties such as a failing grade on an assignment or failure in the course, depending on the nature of the offense. For more information about the FMU Honor Code, see the FMU Student Handbook. If you are ever unsure if your work may be in conflict with this Honor Code, you can always ask me for help without penalty.

### **Disability Services Statement**

If you have a disability that qualifies you for academic accommodations, please provide a letter of verification from the Office of Counseling and Testing. Please provide this letter at least one week before accommodations are needed. Accommodations can only be provided for students documented to be in need of such alterations through the FMU Counseling and Testing Office.

<b>Weekly Readings</b>	<b>Date</b>	<b>Quiz/Assignment**</b>	<b>Topic</b>
<b>Ch 1</b>	Jan 23	Quiz 1 (Jan 19 <sup>th</sup> ), Quiz 2 (Jan 25 <sup>th</sup> )	Review
<b>Ch 2</b>	Jan 30	Quiz 3, SPSS Report 1	Basic Statistics
<b>Ch 3</b>	Feb 6	Quiz 4, SPSS Report 2	Significance Testing
<b>Ch 4</b>	Feb 13	Quiz 5, SPSS Report 3	Data Screening
<b>Ch 7</b>	Feb 20	Quiz 6, SPSS Report 4	Correlation
<b>Ch 9 &amp; 12</b>	Feb 27	Quiz 7, SPSS Report 5	Bivariate Regression & Dummy Coding
<b>midterm</b>	Mar 6		
<b>Ch 11 &amp; 15</b>	Mar 20	Quiz 8, SPSS Report 6	Multiple Regression & Interactions
<b>Ch 20</b>	Mar 27	Quiz 9, SPSS Report 7	Factor Analysis
<b>Ch 21</b>	Apr 3	Quiz 10, SPSS Report 8	Building Scales (Reliability & Validity)
<b>Ch 5 &amp; 6</b>	Apr 10	Quiz 11, SPSS Report 9	t-test & One way ANOVA
<b>Ch 13</b>	Apr 17	Quiz 12, SPSS Report 10	Factorial ANOVA
<b>Ch 22</b>	Apr 24	Quiz 13, SPSS Report 11	Repeated Measures ( t-test & ANOVA)
<b>Final</b>			