

Quantitative Methods in Psychology**01:830:200:H6****Summer Session III (7/8/2013-8/14/2013)****MWF 6:00-9:30 PM****Livingston Campus, [LSH-A142](#)****Instructor:** Elyse Mallimo, M.S.**Office Hours:** By appointment only, Busch Campus Psychology Building, room 232**Contact Information:****Email:** emallimo@rci.rutgers.edu**Office Phone:** 848-445-8939**Sakai Site:** <https://sakai.rutgers.edu>**Required Text:** Statistical Concepts for the Behavioral Sciences, Kiess, H.O., Green, B.A., 4th Ed.

- ISBN-13: 978-0-205-626264-3
- ISBN-10: 0-205-62624-6

Course Description and Learning Goals:

The aim of this course is to develop an understanding of the basic, statistical methods employed by researchers in the behavioral sciences. To this end, we will review a number of statistical concepts that are used in psychological research. Although our discussion of statistics will involve the manipulation of data sets and formulae, an emphasis will also be placed on the conceptual basis underlying each statistical test that is covered. At the end of this course, students should be able to:

- Understand the basics of experimental design.
- Understand how to manage and analyze data sets.
- Compute various descriptive and inferential statistics that are commonly used in psychological research.
- Understand the conceptual basis of hypothesis testing.
- Calculate and interpret statistical tests such as the t-test and ANOVA.
- Choose the appropriate statistical procedures given a particular research question or situation.

Course Grades:

Course grades will be based on the following criteria. See the section entitled “Course Structure and Requirements” for details regarding each component of your grade.

Homework (2 points each; 5 graded assignments)	10 points
Quizzes (10 points each; lowest quiz grade dropped; 2 graded quizzes)	20 points
Exam 1 (in class)	20 points
Exam 2 (in class)	20 points
<u>Final Exam (take home exam)</u>	<u>30 points</u>
Total	100 points

Course letter grades will be determined by the following scale:

90-100	A
85-89	B+
80-84	B
75-79	C+
70-74	C
60-69	D
≤59	F

Course Structure and Requirements:

- **Lecture Style:** Lectures will adhere closely to the contents of the textbook. The topics for each lecture and corresponding reading assignments are outlined in the syllabus. This schedule is subject to change and any changes (regarding lecture material, exams, etc.) will be announced in class and/or will be posted on Sakai.
- **Attendance Policy:** Although attendance will not be formally monitored, it is in your best interest to attend all classes and to come to each class prepared. In other words, you should have read the assigned chapter(s) prior to class and have completed any homework assignment that is due that day.
- **Homework Assignments—10 points toward final grade:** In addition to the readings, homework assignments will be handed out in class that should be completed following each lecture. You may be given some time at the end of each class to work on that day's homework assignment.

Homework will be checked at 5 unannounced times throughout the semester. In order to receive full credit on any given assignment you must show both your work, when appropriate (i.e., on computational problems), and final answer for each question. Each assignment will be worth 2 points. Therefore, you have the opportunity to earn up to 10 homework points toward your final grade.

Completing each homework assignment, regardless of whether or not it will be collected for grading, is highly recommended as a number of questions on the quizzes and exams will closely reflect the questions assigned in your homework. Late homework assignments will not be accepted for any reason. If you happen to miss class on a day in which a homework assignment was collected, then you lose the opportunity to earn points for that assignment.

- **Quizzes—20 points toward final grade:** Quizzes will account for a total of 20 points toward your final grade. There will be 3 quizzes, each worth 10 points and the lowest quiz grade will be dropped. If you happen to miss class on a day in which a quiz was

administered, it is your responsibility to contact me within one week of the quiz to schedule a make up. Failure to schedule and complete a make up for any missed quiz within one week of the originally scheduled test date will result in a grade of “0” for that quiz and no further opportunities to reschedule will be given.

- **Exams—70 points toward final grade:** Exams will account for a total of 70 points toward your final grade. There will be two in class exams (worth 20 points each; 20 X 2= 40 points) and a take home final exam (worth 30 points).

The take home exam will be handed out in class on *Wednesday, August 7th* and must be returned to me (in person) by 6:00 pm, on *Wednesday, August 14th*. Therefore, you will have one week to work on your take home exam.

Make ups for exams 1 and 2 must be taken within one week of the missed exam, and it is your responsibility to contact me in order to set up a time/date for the make up exam. Failure to schedule and complete a make up for exams 1 and/or 2 within one week of their originally scheduled test dates will result in a grade of “0” for that particular exam and no further opportunities to reschedule will be given.

In contrast to exams 1 and 2, **NO** extensions for the take home exam will be given for any reason, so make sure to turn it in by the deadline. Failure to turn in your take home exam by the deadline stated above will result in a grade of “0” for the final exam.

- **Contact Information:** My contact information is at the top of this page. I encourage you to contact me either through email or by office phone if you are having trouble understanding the material presented in class and would like to schedule office hours. However, please note that office hours are by appointment **only** and if we arrange to meet outside of class and you are unable to make it to our appointment you **must** notify me at least 24 hours in advance. Similarly, if I have to cancel office hours (or class) I will notify you in advance.
- **Calculator:** Please bring with you to each class a calculator capable of performing square and square root functions. A calculator of this type may be used on all homework assignments, quizzes, and exams.

I have added each of you to the class Sakai site and any notifications that I have regarding the course will be posted there (see link at top of page). Also, slides for each lecture will be posted prior to each class and can be found under the Resources tab.

Summary of Rules Regarding Missed Exams and Quizzes

Absence from a scheduled exam or quiz should occur only under the most serious of circumstances. Make-ups will be given only for absences that are deemed excusable. Specifically, excused absences will require written and signed documentation, and it will be left to my discretion whether a make up is warranted. Make-ups **must** be taken within one week of the missed exam (**Note: please see page 7 for “Make up Exam and Quiz Contract”; sign, date**

and return to me). Failure to schedule and complete a make up exam or quiz within one week of the originally scheduled test will result in a grade of “0” for that test and no further opportunities to reschedule will be given. Make-ups will follow the same format as regular exams.

Current Academic Integrity Policy:

Students are expected to follow the [Rutgers Academic Integrity Code](#). Anyone who is caught cheating will get a zero for the exam and the Dean's office will be notified. Please make sure that all notes, books, and electronic devices (i.e., computers, cell phones, ipods, ipads, etc, etc.) are put away prior to the start of each exam.

Lecture Topics & Reading Assignments

Day	Date	Topic	Reading Assignment
M	7/8/13	Syllabus Introduction to Statistics Scales of Measurement Assignment: Homework 1	Ch. 1 Ch. 2
W	7/10/13	Frequency Distributions Percentiles and Percentile Ranks Measures of Central Tendency Assignment: Homework 2	Ch. 3 Ch. 4
F	7/12/13	Quiz 1 Measures of Variability Review Assignment: Homework 3	Ch. 5
M	7/15/13	EXAM 1—IN CLASS; CH 1-5	
W	7/17/13	Normal Distribution z-scores Probability Assignment: Homework 4	Ch. 6
F	7/19/13	Inferential Statistics Assignment: Homework 5	Ch. 7
M	7/22/13	Hypothesis Testing One Sample t-test Assignment: Homework 6	Ch. 8
W	7/24/13	Independent Samples t-test Related Samples t-test Assignment: Homework 7	Ch. 9
F	7/26/13	Quiz 2 One Factor Between-Subjects ANOVA Post-hoc tests Review Assignment: Homework 8	Ch. 10
M	7/29/13	EXAM 2—IN CLASS; CH 6-10	
W	7/31/13	Two Factor Between-Subjects ANOVA Interpreting a Factorial ANOVA Assignment: Homework 9	Ch. 11
F	8/2/13	One Factor Within-Subjects ANOVA Assignment: Homework 10	Ch. 12
M	8/5/13	Correlation Assignment: Homework 11	Ch. 13
W	8/7/13	Quiz 3 Regression	Ch. 14

		Nonparametric tests; Chi Square Assignment: Take home final administered	Ch. 15
F	8/9/13	NO CLASS—WORK ON TAKE HOME FINAL	
M	8/12/13	NO CLASS—WORK ON TAKE HOME FINAL	
W	8/14/13	TAKE HOME FINAL DUE BY 6:00 PM—BRING EXAM TO MY OFFICE— <i>Psychology Building, Busch Campus, Room 232.</i>	

Make-up Exam and Quiz Contract

Rules for Scheduling and Taking a Make-up Exam or Quiz:

- I understand that I will be issued a make-up exam only under the most serious of circumstances.
- I agree to provide all necessary written and signed documentation excusing me for my absence from the exam or quiz.
- I understand that it is *my responsibility* to contact the instructor, Miss. Mallimo, to schedule a make-up.
- I understand that I must schedule and complete any make-up exam or quiz within **one week** of the original test date, by 5:00 pm.
- I understand that if I fail to schedule or complete any make-up exam or quiz within one week of the original test, I will receive a grade of “0” for that particular test and will not be given any further opportunities to reschedule.
- I understand that make-up exams and quizzes will follow the same format as regular tests.

Make-up Exam Time Window:

- ❖ If I miss Exam 1, scheduled for Monday, July 15th (7/15/13), then I will schedule and complete a make-up exam by 5:00pm, Monday, July 25th (7/22/13).
- ❖ If I miss Exam 2, scheduled for Monday, July 29th (7/29/13), then I will schedule and complete a make-up exam by 5:00pm Monday, August 5th (8/5/13).
- ❖ I understand that I will not be granted an extension for my take home final exam. Additionally, if I fail to complete and submit my take home final exam by 6:00 pm, Wednesday, August 14th (8/14/13), I understand that I will receive a grade of “0” for this exam.

My signature below indicates that I, _____, have carefully read and
(Print name here)
 completely understand the “Rules for Scheduling and Taking a Make-up Exam or Quiz” and the
 “Make-up Exam Time Window”.

Student Signature

Date