

Quantitative Methods in Psychology
01:830:200: H1
Class Meeting Time: MTWTh 10:50-1:25
Class Location: Hill 116 (Busch)

Changes in class times and room locations will be announced **ONLY** by the instructor. Notices on classroom doors should be ignored, if they have not been confirmed in advance by the instructor.

Instructor: Kris Mescher
Office: 629 Tillett Hall (Livingston)
Email: kmescher@gmail.com
Office Hours: By Appointment
Website: <https://sakai.rutgers.edu/portal>

Course Overview: The primary goal of this course is to provide every student with an understanding of and hands-on experience in the quantitative methods necessary to do research in psychology. This includes understanding and applying basic experimental methodologies, statistical analysis, and graphing data in a meaningful and appropriate way. Students will gain an understanding of which basic statistical analyses are appropriate for different types of data and different research questions. There are only 6 weeks of this course, so we're going to hit the ground running.

Student Learning Objectives: At the end of this semester, students should be able to

- Gain experience and knowledge in basic statistics for psychology
- Demonstrate ability to write and talk about statistics in a psychological manner
- Demonstrate understanding of the importance of a research question
- Be able to choose an appropriate statistical method methodology to answer a research question
- Be able to analyze & think critically about statistics in scholarly publications & in everyday life
- Choose an appropriate methodology to answer a research question

Required Materials

- *Statistics for the Behavioral Sciences, 9th edition*, by Frederick J. Gravetter and Larry B. Wallnau. Published by Wadsworth Cengage Learning. ISBN# 978-1-111-83099-1.
- A calculator (capable of square root functions)
- A 3-ring binder or folder

Office Hours Policy: Because we have very little time together and statistics can be challenging, I try to be flexible with my schedule to accommodate student need. I do not hold “drop-in” hours. I am happy to make appointments and will provide ways to make that simple (e.g., by posting an office hours sign-up on Sakai). However, I'm not in my office if I don't need to be, so if you'd like to come in to see me: ***tell me.***

Attendance Policy: Attendance does not count toward your grade, however failure to attend class will make assignments, tests and quizzes *much more difficult*. If you are absent, you should make alternative arrangements for your work to be turned in, assignments **MUST** be turned in on the day they are due. **I do not accept late assignments**, except in the case of verifiable emergencies, for which you must provide documentation (including a contact person who could vouch for your emergency).

PowerPoint Slides: Lecture slides will be posted on the course website. These are to supplement your own note-taking, not replace it. *I do not guarantee that slides posted on the course website are exact replicas of those used in class.* It is in your best interest to take your own notes.

Homework: There will be an average of one homework assignment a day and we will work through problems together in class. Homework is graded only for completion; if you clearly attempt all problems assigned, you will receive full points (2 per assignment). However, you should correct your homework as we go over the steps in class, so that once it is returned you can put it in your stats notebook. *You must hand in your homework at the end of each class period.* **Homework will not be accepted late except in cases of a documented emergency.** Steps are as follows:

1. Do your homework
2. Bring your homework to class.
3. Mark and correct the problems you miss. (*Do not erase your original work!*)
4. Turn in your homework.
5. Once returned, put your (now corrected) homework in the stats notebook

Stats Notebook: All your completed (corrected) homework, exams and review sheets should be contained in your stats notebook. This should be *neatly organized*. If you take further statistics classes, this will serve as your very own basic stats reference book. Look at this as an opportunity for points that reflect your effort! You will turn this in to me on the last day of class, students who would like stats notebooks returned should e-mail me within 2 weeks of the end of the semester.

Quizzes: This course will have 4 quizzes, they will appear on Sakai on Thursdays after class, and are available to complete any time before class begins on Monday. These will cover basic & applied knowledge of statistical concepts, they are designed to give you periodic practice in types of questions likely to be on exams and to allow me to gauge which concepts may need further clarification. Each quiz will consist of 20 questions reviewing that week's material and be worth 10 points. Your lowest QUIZ GRADE will be dropped. Based on this generous grade-dropping policy and the availability of the quiz over the weekend, **NO MAKEUP QUIZZES WILL BE GIVEN FOR ANY REASON.**

Exams: This course has a midterm and a final worth 75 points apiece. Each will consist of multiple choice and short answer questions much like those that appear in the quizzes; in addition, 3-5 calculation problems. For the final: multiple choice/short answer sections are cumulative, but calculation is not.

Grades: Homework (40 pts), quizzes (30 pts), midterm (75 pts), final (75 pts) and stat notebook (30 pts). There is no extra credit in this course. Course letter grades will be determined by the following scale:

A	90-100%	225 - 250 points
B+	86-89%	215 – 224 points
B	80-85%	200 – 214 points
C+	76-79%	190 – 199 points
C	70-75%	175- 189 points
D	61-69%	152 – 174 points
F	≤60%	151 points or less

Academic Integrity: All work handed in must be your own. Plagiarism in any form is completely unacceptable. If you have any questions about what may or may not be plagiarism please ask me. Any

students found to be plagiarizing will receive an F grade for the course and the case will be referred to the appropriate University authorities.

Students With Disabilities: Any student who feels he or she needs accommodation for a physical or learning disability, please contact the Office of Disability Services and read more about Rutgers' policy at <http://disability/services.rutgers.edu> . If you request accommodations for this course, you will need a letter from Disability Services. This letter must be provided to me by our second class, at which point you may make a request for course-specific accommodations. The Chair of Undergraduate Psychology and I will review your request and may choose to modify it before it is approved.

*Schedule is subject to change, any changes will be announced in class/on Sakai. Homework for each topic will be announced in class.

Week	Class	Date	Topic
1	1: Monday	July 8 th	Introduction
	2: Tuesday	July 9 th	Frequency Distributions
	3: Wednesday	July 10 th	Central tendency
	4: Thursday	July 11 th	Variability
2	1: Monday	July 15 th	Z-scores
	2: Tuesday	July 16 th	Probability
	3: Wednesday	July 17 th	Hypothesis testing
	4: Thursday	July 18 th	Z-test
3	1: Monday	July 22 nd	T-tests (Day 1)
	2: Tuesday	July 23 rd	T- tests (Day 2)
	3: Wednesday	July 24 th	Review/Catch-Up
	4: Thursday	July 25 th	MIDTERM
4	1: Monday	July 29 th	Review midterm results Intro to ANOVA
	2: Tuesday	July 30 th	ANOVA (Day 2)
	3: Wednesday	July 31 st	ANOVA (Day 3)
	4: Thursday	August 1 st	Intro to correlation
5	1: Monday	August 5 th	Correlation
	2: Tuesday	August 6 th	Regression
	3: Wednesday	August 7 th	Regression
	4: Thursday	August 8 th	Chi-square
6	1: Monday	August 12 th	Review
	2: Tuesday	August 13 th	Review
	LAST DAY	August 14 th	FINAL