Syllabus Quantitative Methods in Psychology 200 section H1 – Summer 2015
Version 07-05-2015

Who

Instructor: Estelle Mayhew
Instructor email: emayhew@rci.rutgers.edu

When/where

Class location: Hill 116
Class time: Mo/Tu/We/Thu 10:50 am- 1:25 pm
Office hours instructor: Thursdays 1:40 pm or by appointment
Office location instructor: Room 229, Tillett Hall Livingston Campus

Office hours

To arrange office hours "by appointment"

- If you can't make my standard office hours we can meet "by appointment". What this means is that we need to coordinate our schedules. The fastest way to do that is to send me the slots of time that you can reasonably make it to my office (Tillett 229, Livingston campus), and I will look at those and pick some times that also work with my schedule (which varies from week to week).
- Example of timeslots:
  Mondays 10-12 and 3-4, Tuesdays 9-12, Wednesdays after 4, Thursdays before 2, Fridays no availability.
- Sending me just one time is almost never going to work, so be comprehensive the first time and save us some email back and forth.

What

This course is a basic statistics course. The goal of this course is for you to learn which statistical procedures to use in which situations. We will be dealing with both descriptive statistics, which are used to organize and summarize data, and inferential statistics, which allow you to generalize your findings from your set of observations to a wider group. Keep in mind that statistics may be math, but it is math for the purpose of understanding your research findings. Statistical procedures are just tools for understanding the really interesting things in life: research data. By the end of the course you should be able to pick appropriate statistical procedures for describing and analyzing your data, you should be able to perform those procedures, and interpret the results.

Requirements

- The required <u>text</u> for this course is *Essentials of Statistics for the Behavioral Sciences* by Frederick Gravetter and Larry Walnau, 8th edition.Published by Cengage.
- You will need a simple calculator, capable of square roots. You will not be allowed to use your phone or you laptop for calculation during exams, so it's best to practice with your calculator.

Class Website

- The class has a Sakai website which you should have access to if you are enrolled in the course.
- Make sure you check that you can access our site, and keep an eye on announcements from the site.
- For this class the slides will not be posted until after class, for those unfortunate souls who could not make it to class. You need to make notes in class.

Tentative Class Schedule

Date	Topic/Book readings	Homework
Mo 7/6	Chapter 1 Intro to statistics	
Tu 7/7	Chapter 2 Frequency distributions	
We 7/8	Chapter 3 Central tendency measures	G-Homework 1
Th 7/9	Chapter 4 Variability measures	
Mo 7/13	Chapter 5 Z-scores	G-Homework 2
Tu 7/14	Chapter 6 Probability	
We 7/15	Chapter 7 Distribution of samples	G-Homework 3
Th 7/16	Review & Chapter 8 Hypothesis testing	
Mo 7/20	Exam 1 - Chs. 1 -7 Chapter 8 cont'd	
Tu 7/21	Chapter 8 cont'd, Chapter 9 t-statistic	
We 7/22	Chapter 9 cont'd	G-Homework 4
Th 7/23	Chapter 10 Independent samples t-test	
Mo 7/27	Chapter 11 Dependent samples t-test	G- Homework 5
Tu 7/28	Chapter 12 Introduction to ANOVA	
We 7/29	Review Chapter 12 cont'd	G-Homework 6
Th 7/30	Exam 2 - chapter 8-11	
Mo 8/3	Chapter 13 Repeated measures ANOVA	G-Homework 7
Tu 8/4	Chapter 13 Factorial ANOVA	
We 8/5	Chapter 14 Correlation	G-Homework 8
Th 8/6	Ch. 14 cont'd Chapter 15 Chi-square	
Mo 8/10	Chapter 15	G-Homework 9
Tu 8/11	Catching up & Review	G-Homework 10
We 8/12	Final exam chapter 12-15	

What makes the grade?
(1) Exams

o There will be <u>three non-cumulative exams</u>. See further down in the syllabus for absence policy for exams.

Exam 1:   30% of grade
Exam 2:   25% of grade
Exam 3:   25% of grade
- Exams will have both conceptual and computational questions, in both multiple choice, and short answer (calculation on paper, showing your work) format.

(2) Homeworks

- The remaining 20% of your grade will be the result of 10 gradeable homeworks each worth 2 points.
- These assignments are your own work, and <u>may not be completed together with other people</u>. They are due at the <u>beginning of class on the due date</u>. You may turn it in late with the loss of 1 point.

How to do well in the course

- Come to class, and arrive in time.
- Announcements are at the beginning of class, and they are frequently important! Make sure you arrive in time.
- This course is hierarchical, that means that you need to understand and be able to do the work in the early parts of the course in order understand and do the work in the later parts of the course (unlike some courses, where you can flake out at the beginning, middle or end, as long as you make up for it during the other sections). So keep on top of the material.
- Summer courses are very intense. On the one hand that is an advantage, as you are more likely to remember what I said in class when it comes to exam time. On the other hand, it moves forward VERY quickly. If you get behind there is very little time to catch up. And that is a problem, because the later depends on the earlier (see above).
- Pay attention in class, follow along with the examples.
- Do the practice homeworks. They won't be graded, but you need to do the computations quickly come exam time. You will not be able to do that if the exam is only the second time you've done a particular type of computation. You might be fighting with your calculator.

Grading Scale for letter grades end semester
A   90% or higher
B+   85% - 89%
B   80%- 84%
C+   75% - 79%
C   70% - 74%
D   60% - 69%
F   below 60%

Course Ground Rules
(a) In class
I really only want you in class if you are going to be paying some attention, so be so kind as to turn off your cell phone. If you urgently need to have a conversation, or watch YouTube you are free to do so, but go elsewhere. Other people want to learn the material, even if you are currently not so inclined. If you are having a conversation disturbing others, I will ask you to leave.

(b) Academic dishonesty
You are required to abide by the Rutgers policy on academic integrity; please familiarize yourself with this policy, you can view it at http://academicintegrity.rutgers.edu/integrity.shtml Read the section on level three violations and the sanctions that follow!

(c) Absences from class

It is your responsibility to arrange to obtain information (other than the downloadable class slides, and those are outlines) if you miss one or more classes. Please do not ask or send email to the professor. If you can, arrange in advance for someone in the class that you know to take good notes for you.

(d) Missing an exam
o   There will be non-cumulative make-up exams.
o   ONLY for those who present a doctor's note or a Dean of Students' note within a week of the missed exam to the instructor can take this without penalty, see below for makeup policy for those who do not have a valid excuse.

You will be allowed to take a make-up exam if, within one week of the exam, you present a doctor's note or letter from your dean's office to the professor.
(a) For illnesses: I need a doctor's note to verify your illness. So if you get sick, *get a doctor's note.*
(b) For car accidents: the dean will most likely ask for a police report to verify that the accident took place.
(c) For personal or family emergencies: the dean will most likely require some verification of the emergency (such as a death certificate or obituary if a relative has died). If it is a personal issue of some other nature, it will be up to the judgment of the dean to determine whether or not you should be excused from the exam (and thus be allowed to take the make-up).
Basically folks: I need some paper documentation from you.

- Those who miss the exam because they forgot, overslept, were inebriated, or whatever other reason that is not really an excuse, have to come to talk to me <u>within one week of the exam</u>, and <u>will probably be allowed to take the makeup exam with a penalty: 8% off the top of the exam grade.</u> In the end that is better than a zero for the exam.

Note: Your decision to remain enrolled in the course after the first class session is your implicit agreement to abide by everything stated above.