

**Psychology 222**  
**Psychological Statistics**  
**Summer 2019**

**Course Location and Time**

Skaggs 246

Monday to Thursday 9:00 – 10:50 am

**Instructor Information**

Instructor: Gabriella (Chonghui) Ji

Office: Skaggs 360

Email: [gabriella.ji@umontana.edu](mailto:gabriella.ji@umontana.edu)

Office hours: Mondays and Wednesday 11-12am and by appointment

**Text**

McClave, J. & Sincich, T. (20013). *Statistics* (12<sup>th</sup> ed.). Pearson.

**Course Description**

This course is designed to introduce you to the concepts and practical statistical skills necessary for psychological research. Topics discussed include displaying and describing data, the normal curve, regression, probability, statistical inference, confidence intervals, and hypothesis tests with applications in the real world.

**Course Objectives**

The primary objective of this course is to provide the opportunity to acquire a working knowledge, overview, and understanding of statistical methods regularly used in psychological, social, and related sciences, and to apply and interpret the min the context of empirical research.

Students participating fully in the course will be able to:

- Demonstrate knowledge of probability and the standard statistical distributions
- Understand the common statistical techniques and terminology used in studies that are presented in the popular press and psychology related journals
- Use and understand the principal numeric and graphical techniques to display and summarize data
- be able to discuss and explain what statistic is and how it is used in the field of psychology

This sounds like a lot, but these objectives are attainable for any student who gives a reasonable effort in this course. It will not require a super human effort, just a desire to learn, a willingness to regularly participate, and a dedication to complete all assignments in a timely manner.

## Course Requirements

This course is comprised of a combination of lecture, in-class activities, take home exercises, and final exam.

In this course, most of the learning occurs during class time itself. Thus, as a result, **class attendance is mandatory**. Every person gets one “free” skip, which is designed only for emergencies. After that, if you must miss class, you must notify me in advance and discuss a make-up assignment that covers the material for that date. Also, if you miss multiple days, the course instructor may decide you should drop the course. In short, **PLAN ON BEING IN CLASS EVERY DAY**.

## Assignments

The course is comprised of weekly assignments that are designed to evaluate your understanding of course material. The spirit of the class is to make the take-home exercises as useful and applicable as possible. Therefore, assignments are handed out in class on Thursdays. The second half of Thursday lectures are designed to be homework workshops. During that time, you can work on the assignments on your own while having the instructor available for questions.

Assignment sets are to be **submitted at the beginning of Monday classes** of the following week and are graded on a “credit vs. no credit” scale. Feedback will be given for each assignment but **NOT THE CORRECT ANSWERS**. You must come to the instructor for the correct solutions and approaches to problems. **Late assignments will NOT be accepted**.

## Extra Credits

You can earn up to **2 extra points** that can count toward your final exam grade by completing SONA study. For this summer, there will be one study open for our course: Metacognitive Processes.

To find out more about this study, check SONA website: [https://umontana.sona-systems.com/exp\\_info.aspx?experiment\\_id=36](https://umontana.sona-systems.com/exp_info.aspx?experiment_id=36)

The deadline for study completion is June 18<sup>th</sup>. If you choose to participate and use the SONA credit to extra points for Psyc 222, you will need to assign SONA credits to **PSYX222, Sect01B, Su2019, Ji** to receive the credit for this course.

## Evaluation

Final Grades will be based on the following:

Midterm (100 points in total): 30%

Final exam (100 points in total): 30%

Portfolio (100 points in total): 40%

\*\*\*A complete portfolio includes all 5 assignments with revisions. Each marked AND revised assignment is worth 20 points.

\*\*\*To maximize your grade, if your grade on the final is better than the midterm, your final exam grade will count for 50% of the total grade and your midterm will count for 10%.

\*\*\*The final exam is cumulative over the entire course, and there are no make-up tests in this course.

**Final letter Grades** will be assigned according to the grade thermometer below. Course grading is traditional.

% points	Grade
100-90	A
89-80	A-
79-77	B+
76-73	B
72-70	B-
69-67	C+
66-63	C
62-60	C-
59-57	D+
56-53	D
52-50	D-
<50	F

## **Course Guidelines and Policies**

### **Course Website**

Materials for the course will be available on the internet through Moodle. Class announcements and assignments will also be posted when necessary, so please check the website on a regular basis. In addition to checking Moodle, you are also responsible for checking your UM email regularly, as you may receive course-related emails from time to time.

### **Academic Honesty**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or disciplinary sanction by the University. All students need to be familiar with the [Student Conduct Code](#).

### **Disability Modifications**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and [Disability Services for Students](#). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or call 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

### **Email Policy**

You are welcome to email me with general questions about the course, and I will typically respond within 48 hours. However, if you have a lot of questions, I prefer you come to office hours.

## **The Learning Environment**

I would like this class to have a relaxed atmosphere where students can feel free to ask questions and comment on the material being presented and discussed. Please do not hesitate to raise your hand for clarification on a topic, to ask about related material, or to raise an interesting point. However, remember that not everyone has similar viewpoints, so please try to be respectful of your classmates and their opinions.

Another way to create a respectful and productive learning environment is to ensure that it is free from distractions. Therefore, please turn off your cell phones and other personal electronic devices prior to coming to class. Repeated use of personal electronic devices during class time will result in points being deducted from your course grade. If you wish, you may use a laptop or tablet to take notes. However, if I see that you are emailing, surfing the web, or using it for any non-class-related purposes, you will lose the privilege of using it in class.

## PSYX 501 Course Calendar

*Note: This course schedule is tentative, and therefore subject to change with appropriate notice.*

WEEK	DATE	TOPICS	READING AND ASSIGNMENT DUE
Week 1	5/13	Introduction Data presentation and application	Chapter 1
	5/14	Collecting and describing Data Central Tendency and Variability	Chapter 1; Chapter 2
	5/15	Standard Deviation and outliers Rules and Events	Chapter 2; Chapter 3
	5/16	Random Sampling	Chapter 3
Week 2	5/20	Discrete Random Variable	Chapter 4 <b>Assignment 1 Due</b>
	5/21	Discrete Random Variable cont.	Chapter 4
	5/22	Continuous Random Variable	Chapter 5
	5/23	Continuous Random Variable cont.	Chapter 5
Week 3	5/27	Memorial Day <b><u>No Class</u></b>	No readings ☺
	5/28	Sampling Distribution	Chapter 6 <b>Assignment 2 Due</b>
	5/29	Single Sample testing with Confidence Interval	Chapter 6&7
	5/30	Single Sample testing with Confidence Interval cont. <b><u>Midterm</u></b>	Chapter 7
Week 4	6/3	Single Sample Hypothesis Testing	Chapter 8 <b>Assignment 3 Due</b>
	6/4	Single Sample Hypothesis Testing cont.	Chapter 8
	6/5	Two Sample Hypothesis Testing	Chapter 9
	6/6	Two Sample Hypothesis Testing cont.	Chapter 9
Week 5	6/10	Analysis of Variance	Chapter 10 <b>Assignment 4 Due</b>
	6/11	Analysis of Variance cont.	Chapter 10
	6/12	Simple Linear Regression	Chapter 11
	6/13	Simple Linear Regression cont.	Chapter 11
Week 6	6/17	Categorical Data Analysis	Chapter 13 <b>Assignment 5 Due</b>
	6/18	Categorical Data Analysis cont.	Chapter 13
	6/19	Review session	
	6/20	<b><u>Final exam</u></b>	<b><u>Portfolio Due</u></b>