

Psyx 222 – Psychological Statistics

Spring 2020

Instructor Information

Instructor: Daniel J. Denis, Ph.D.
Office: 369 Skaggs Building
Office Hours: Mondays, 12-1, Wednesdays, 12-2.
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Course Information

Lectures: M, W, F, 11:00 – 11:50.
Location: Chemistry 123, course postings on Moodle.

Labs/Tutorials: Thursdays, 246 Skaggs Building
Times: Thursdays, 10:00 – 10:50, 11:00 – 11:50, 3:00 – 3:50, 4:00 – 4:50.

Teaching Assistant: Linus Chan
Office: 236 Skaggs
Office Hour: Mondays, 1-2pm.
E-mail: yinloklinus.chan@umontana.edu

Course Objective

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 apply and interpret them in the context of empirical research.

Required Text

McClave, J. & Sincich, T. (2013). *Statistics* (12th edition). Pearson.

*** You may also use the 13th edition.

Evaluation

Final Grades will be based on the following:

Test 1: 10%

Test 2: 25%

Final Exam: 50%

Assignment Sets (3 submissions of completed work each @ 5%): 15%

Final Grade Determination (Maximizing your Grade)

*** If your grade on the final exam is better than Test 1 or Test 2 or both, your final exam grade will count for the corresponding test weight. The final exam is cumulative over the entire course. If you miss,

for whatever reason, Test 1 or Test 2, the relevant weight is automatically transferred to the final exam. **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 (you CANNOT change your grade to pass/fail unless you have an exceptional reason).

% 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

Evaluations and Assignments

All material discussed in the course is theoretically testable and can appear on tests and exams. However, what is emphasized and discussed in class has the greatest probability of appearing, and you should focus mostly on these concepts unpacked in class discussion and appearing on assignments leading up to evaluations. Tests 1 and 2, as well as the final exam, are multiple choice and short-answer. Assignment sets are to be submitted on the day of the given test or exam (in hard copy only) and are graded on a “credit vs. no credit” scale. **Late assignments will NOT be accepted.** Work that is overall complete, thorough, and well-prepared will receive full credit. Work that is incomplete, scattered, and not carefully prepared, or absent altogether, will not receive credit. You are strongly encouraged to attend weekly labs to review/edit your answers (learn from your mistakes as well), and submit assignment sets that are complete to ensure you receive credit for these easier points. Assignment sets are designed to help you prepare for evaluations, so it is in your best interest to prepare them carefully, revise/edit/improve upon them based on what you are learning in class and in lab. Use them as mini “study guides” to help prepare for evaluations. **Assignments will be posted via Moodle usually on Fridays, which will then be reviewed in lab the following week. Keep an ear out for announcements in class and/or be sure to check Moodle regularly for updated assignment postings. You must attend lab to learn of the correct solutions and approaches to problems, as they will not be posted to Moodle at any time, nor will class or TA notes be provided at any time. You are strongly encouraged to attend all lectures and all labs.**

Course Policies and Guidelines

Policy on Missed Tests

A missed test will result in a grade of **zero** for that test. **There are NO MAKE-UP TESTS for this course.** You are encouraged to attend all evaluations as scheduled. If you miss any of the tests, the weight of that test is automatically transferred to the final exam.

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 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. We will work with you and Disability Services to provide an appropriate modification.

Academic Misconduct

You are expected to adhere to the university's [Student Conduct Code](#) with regard to academic integrity. All students must practice academic honesty. Academic misconduct in this course will not be tolerated and is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

Class Behavior

The expectations for this course are such that you remain respectfully silent while either the instructor is speaking or a colleague in the class is asking or responding to a question. In accordance with **policies set by the University, disruptions in class will not be tolerated.** This policy is set so that every student has the opportunity to learn in a quiet and constructive environment. **A failure to meet this expectation will result in you being dismissed permanently from the class.** This policy is very strict as to protect the rights of students who have invested time, money and energy into this course and deserve nothing less than an optimal learning environment. **The instructor will make every effort to make sure you, the student, has an ideal learning environment.** Please speak to the instructor privately if you are being disrupted in class.

Incompletes

Departmental and University policies regarding incompletes do not allow one to change "incomplete" grades after 1 year has passed since the "I" was granted.

Tentative Course Schedule (Subject to Change EXCEPT for Evaluation/Test Dates)

DATE	TOPIC	CHAPTERS McClave	Chapter Assignments	LABS Chapter
13 Jan. Mon 15 Jan. Wed. 17 Jan. Fri.	<i>Syllabus, Statistics, Data, and Scientific Thinking</i>	1	#1	Orientation
20 Jan. Mon. 22 Jan. Wed. 24 Jan. Fri.	<i>Martin L. King Jr. Day (NO CLASS)</i> <i>Methods for Describing Sets of Data</i>	2	#2	1
27 Jan. Mon. 29 Jan. Wed. 31 Jan. Fri.	<i>Probability</i>	3	#3	2

DATE	TOPIC	CHAPTERS McClave	Chapter Assignments	LABS Chapter
03 Feb. Mon. 05 Feb. Wed. 07 Feb. Fri.	<i>Discrete Random Variables</i>	4	#4	3
10 Feb. Mon. 12 Feb. Wed. 14 Feb. Fri.	<i>Continuous Random Variables</i>	5	#5	4
17 Feb. Mon. 19 Feb. Wed. 21 Feb. Fri.	Presidents' Day (NO CLASS) TEST 1 (10%) <i>Sampling Distributions</i>	6	Assign. Ch. 1-4 DUE (5%)	5
24 Feb. Mon. 26 Feb. Wed. 28 Feb. Fri.	<i>Inferences Based on a Single Sample (Confidence Intervals)</i>	6/7	#6/7	Test 1 Review
02 Mar. Mon. 04 Mar. Wed. 06 Mar. Fri.	<i>Inferences Based on a Single Sample (Tests of Hypothesis)</i>	8	#8	6/7
09 Mar. Mon. 11 Mar. Wed. 13 Mar. Fri.	<i>Inferences Based on Two Samples (Confidence Int. and Tests of Hyp)</i>	9	#9	8
16 Mar. Mon. 18 Mar. Wed. 20 Mar. Fri.	Spring Break (NO CLASS)	-	-	-
23 Mar. Mon. 25 Mar. Wed. 27 Mar. Fri.	<i>Analysis of Variance: Comparing More than Two Means</i>	10	#10	9
30 Mar. Mon 01 Apr. Wed. 03 Apr. Fri.	<i>Analysis of Variance: Comparing More than Two Means</i> TEST 2 (25%)	10	#10 Assign. Ch. 5-10 DUE (5%)	10
06 Apr. Mon 08 Apr. Wed 10 Apr. Fri	<i>Simple Linear Regression (con't)</i>	11	#11	11
13 Apr. Mon 15 Apr. Wed 17 Apr. Fri	<i>Simple Linear Regression (con't)</i>	11	#11	11
20 Apr. Mon 22 Apr. Wed 24 Apr. Fri	<i>Simple Linear Regression (con't)</i> <i>Categorical Data Analysis</i>	11/13	#11/13	11/13
27 Apr. Mon 29 Apr. Wed 01 May. Fri	<i>Overflow/Final Exam Preview</i>	TBA	-	Final Exam Prep
04 May. Mon	FINAL EXAM (50%) (10:10 – 12:10)	ALL Course Material	Assign. Ch. 11-13 DUE (5%)	-