

PY 305: Psychological Statistics

Summer 2008

MTWR 12:30 – 2:40 PM

166 Gries Hall

COURSE GOALS

- Provide an introduction to the logic and use of statistics in psychology
- Learn to select the appropriate statistical analyses for different situations
- Be able to calculate and interpret the results of statistical analyses
- Be able to critically evaluate media reports and understand journal articles
- Learn the basics of SPSS

COURSE EXPECTATIONS

I expect you to keep up to date on the readings and assignments. Learning statistics requires lots of practice, so working many problems will help you succeed. This is also a very cumulative topic – if you do not master the material at the beginning of the course, you will struggle with later material.

****If you do not understand something, do not be afraid to ask for help!****

You are strongly encouraged to attend class. Consistent absences will likely affect your grade in two ways. First, you are responsible for material covered in class. Not all material covered in class will be in your textbook.

****If you must miss a lecture, it is *your* responsibility to get notes from another student in the class.**** Second, there will be group activities and discussions at some of the class meetings, which will constitute a portion of your grade.

EXAMS & ASSIGNMENTS

Exams: There will be three exams, consisting of multiple-choice and short answer questions, as well as statistical analyses.

Worksheets: There will be 11 worksheets, to be done as homework assignments. You may help each other on these assignments, but you should do all the problems by yourself as well, in order to get the practice you need. You may drop your lowest score.

SPSS Assignments: There seven SPSS assignments in your textbook. You may help each other on these assignments, but you should do all the problems by yourself as well, in order to get the practice you need. You may drop your lowest score.

In-class Activities: There will be several in-class group projects, which will be related to the topic of the day. *You will not be able to make up these activities.*

Instructor: Dr. Maya G. Sen
msen@nmu.edu (best way to contact me)

336 Gries Hall; 227-2986

Office Hours: MTW 11am-12pm & by appointment

TA: Erin VanEnkevort
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342 Gries Hall

Office Hour: Monday 10-11am & by appointment

Textbook: Aron, A., Aron, E. N., & Coups, E. (2008). *Statistics for the Behavioral and Social Sciences, 4th ed.* Upper Saddle River, NJ: Prentice Hall.

SPSS version 15.0 for Windows

Calculator w/ square root & memory functions

Assignment	Points
3 exams (100 pts each)	300
Worksheets	100
SPSS Assignments	60
In-class Activities	40

Grade Distributions			
A	93-100%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	<60%

Special needs: If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office at 2001 C. B. Hedgcock (227-1700; TTY 227-1543). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state and University guidelines.

Extra Credit: You can earn up to 10 points by critiquing media reports of research findings. You will need to find the source article and discuss how accurate the media report is. Each critique should be about 1 page, and is worth up to 5 points.

COURSE POLICIES

- If you have a serious problem that affects your performance in class, please contact me immediately. I can do much more to help you if you let me know what is happening before you miss deadlines.
- Laptops may be used as long as you are not distracting other students.
- Please keep copies of all assignments until final course grades have been posted.

Academic Dishonesty: No sort of academic misconduct will be tolerated in this course. You are required to be familiar with the University Student Code on Academic Dishonesty (<http://dso.nmu.edu/handbook.php?part=2#section2subsection3>). The expectation is that the work you submit will reflect your individual efforts (except as noted).

Students who violate the policy will receive a zero on the assignment or test, and in most cases will receive a failing grade in the course. There will be no provisions for making up or revising the assignment or test. All incidents of academic dishonesty will be reported to the Dean of Students. When in doubt, ask!

Late Assignments: All assignments should be turned in by the due date. Assignments will lose five percentage points for each 24 hours that they are late.

Make-up Examinations: Exam attendance is mandatory. Make-up examinations will be given at my discretion, and will only be allowed in the case of a serious & unavoidable problem, such as confining illness (documentation from a professional person required – e.g., physician, psychologist) or family emergency. You must contact me before the time of the exam to schedule a time for the make-up exam. If I am unavailable, leave a message at my office or on email.

Incompletes: Incompletes will be granted only in rare cases, and must be requested IN WRITING before the final. If an incomplete is granted, you have up to one year to complete the required work, as per University policy.

COURSE SCHEDULE

Dates are subject to change.

Week	Date	Day	Topic	Readings
1	May 19	Mon	Introduction; SPSS installation	Syllabus
	May 20	Tues	Displaying the Order in a Group of Numbers Using Tables and Graphs	Chapter 1
	May 21	Wed	The Mean, Variance, Standard Deviation, and Z Scores	Chapter 2
	May 22	Thurs	Ch 2 cont'd	WS 1 & SPSS ch 1 due
2	May 26	Mon	NO CLASS – MEMORIAL DAY	
	May 27	Tues	Correlation and Prediction	Chapter 3; WS 2 due
	May 28	Wed	Ch 3 cont'd	SPSS ch 2 due
	May 29	Thurs	The Normal Curve, Sample Vs. Population, & Probability	Chapter 4; WS 3 due
3	June 2	Mon	Exam 1: Chapters 1 – 4	WS 4 & SPSS ch 3 due
	June 3	Tues	Introduction to Hypothesis Testing	Chapter 5
	June 4	Wed	Hypothesis Tests with Means of Samples	Chapter 6
	June 5	Thurs	Ch 6 cont'd	WS 5 due
4	June 9	Mon	Making Sense of Statistical Significance: Effect Size and Statistical Power	Chapter 7; WS 6 due
	June 10	Tues	Introduction to the t Test: Single Sample and Dependent Means	Chapter 8; WS 7 due
	June 11	Wed	Ch 8 cont'd	
	June 12	Thurs	Exam 2: Chapters 5 – 8	WS 8 & SPSS ch 8 due
5	June 16	Mon	The t Test for Independent Means	Chapter 9
	June 17	Tues	Ch 9 cont'd	
	June 18	Wed	Introduction to the Analysis of Variance	Chapter 10; WS 9 due
	June 19	Thurs	Ch 10 cont'd	SPSS ch 9 due
6	June 23	Mon	Ch 10 cont'd	
	June 24	Tues	Chi-Square Tests and Strategies When Population Distributions Are Not Normal	Chapter 11; WS 10 due
	June 25	Wed	Applying Statistical Methods in Your Own Research Project	Chapter 12; SPSS ch 10 due
	June 26	Thurs	Exam 3: Chapters 9 – 12	WS 11 & SPSS ch 11 due