Introduction to Research Methods (Psy 301) San Diego State University Spring 2011

INSTRUCTOR: Shawna Saponjic, PhD

OFFICE HOURS: T/Th 11:00am - 12:00 (or by appointment) LS North 24 E

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LECTURE: Tuesdays/Thursdays 9:30 – 10:45am (LA 2203)

TA: Katie McHugh (katiecat28@hotmail.com)

Office Hours: T/Th 12:30 – 1:30pm (LS North 24 E)

LAB: Tuesdays 11:00am – 12:50pm in GMCS 428

TA: Meghan McDonald

LAB: Tuesdays 1:00 – 2:50pm in GMCS 428

TA: Laura Petersen

COURSE OVERVIEW: In this course you will be learning about and implementing various methodologies used in psychology. Lectures will cover various experimental techniques, methodological concepts, and statistical procedures. Labs will be heavily interactive, and will include designing and conducting your own research and reporting this in APA-style reports.

LEARNING OUTCOMES: By the end of this class you will know how to:

- 1. Use scientific method to answer questions about human behavior:
 - Measurement issues, learning
 - to differentiate between constructs and observable behaviors
 - to develop operational definitions and observational strategies
 - to write good survey guestions
 - to develop measures that are both reliable and valid
 - **Design** issues, learning
 - to state hypotheses that can be tested
 - to design or plan modest studies using correlational, experimental and quasi-experimental (real world) designs
 - to develop good strategies for sampling and assignment to treatments
- 2. Make sense of data that you have collected or read in the news:
 - Interpretation of results, learning
 - to interpret statistical results including significance, effect size, margin of error and confidence intervals
 - Evaluation of designs, learning
 - to state the type of conclusion, causal or otherwise
- 3. Write scientific reports:

- Accuracy, learning
 - to follow directions to the letter
 - to describe procedures and results in perfectly accurate detail
 - to submit reports that have been checked for spelling and sense
- APA style, learning to follow specific rules for scientific writing
- Effectiveness, learning to make clear and persuasive statements

REQUIRED MATERIALS:

- -NOTE: The text and writing guide have been bundled for you in the bookstore.
- -Introduction to Research Methods San Diego State Custom Edition for PSYCH 301. Pelham & Blanton.
- -Writing with style, 5th ed. Szuchman.
- -Flash drive
- -If you do not by custom text:

Conducting research in psychology: Measuring the weight of smoke, 3rd ed. Pelham & Blanton, Cengage Pub.

CLASSROOM POLICIES:

Academic Dishonesty: The Student Code of Conduct is online at http://www.sa.sdsu.edu/srr/conduct1.html. The academic dishonesty code specifies actions for behaviors such as cheating on tests, plagiarism, and/or inappropriately collaborating with others. I will enforce the code in the course; cheating or other violations will result in appropriate penalties, including a failing grade on the assignment or in the course, and the reporting of that incident to the Center of Student Rights and Responsibilities. Students have the right to appeal such action in accord with due process.

Students with disabilities: San Diego State University seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Student Disability Services (SDS), 619.594.6473 or online at http://www.sa.sdsu.edu/sds.

Grade challenges: Upon receiving graded assignments, you have **1 week** to check your grade with the instructor. This includes the grade for the final exam and your final grade for the class. After one week, grade challenges will not be reviewed.

LAB:

Assignments: Be sure to check your lab manual *before* lab. For most labs there will be an assignment that you need to do in advance and bring to lab (pre-lab assignments). The TA's will be checking these assignments at the beginning of lab. To receive full points on the lab you must have done the assignment before lab.

Lab Rules: You must attend your lab section (i.e., the section in which you are officially enrolled). Never insert a flash drive *before* you have mailed in your assignment, otherwise you will receive a zero for that lab. Send in a report *before* you leave lab, and if necessary send in the rest later. If you miss lab for some reason, the lab report is still due but is worth only half the points. You can revise one lab from the Cell Phones Labs (labs 2-6) and one lab from the Survey Project Labs (labs 7-14) for additional but not the full number of points.

EVALUATION & GRADES:

Exams: The exams will be both multiple choice and short answer. Exams will cover lecture information, textbook readings and lab material. The first two exams are worth 100 points each. The final exam is comprehensive and worth 150 points. You may make up an exam only if you have a serious reason for not taking it and if you contact me in advance. Once you have started taking an exam you may not leave the room for any reason.

Cell Phone Paper: The first six labs will include activities from the *Writing with Style* book as well as prelab writing assignments and written lab reports. These will each be worth 15 points. These are available in the lab manual section of your textbook as well as on BB.

Survey Project: The last eight labs will include prelab writing assignments and written lab reports. These will each be worth 12 points. These are available in the lab manual section of your textbook as well as on BB.

In-Class Activities: The class will be doing 8 activities during the semester. The activities are meant to reinforcement concepts and help prepare you for the exams as well as the media report. These activities will be worth 5 points each. Only 7 (35 points) of the 8 activities will go toward your grade composition (see below). So, you can miss one activity and drop the "0". If you participate in all 8 activities you will get 5 bonus points (40 total points). You cannot get credit for the activities unless you are in class. There are **NO** make-up activities.

Points Grade Composition		Grade Rubric			
200	Exams (2 @ 100)	Α	94 & above	С	73-76
150	Final Exam	A-	90-93	C-	70-72
90	Cell Phone Paper (6 @ 15)	B+	87-89	D+	67-69
96	Survey Project (8 @ 12)	В	83-86	D	63-66
35	In-class Activities	B-	80-82	D-	60-62
571	Total Points	C+	77-79	F 59	& below

Class Schedule

IRM = Introduction to Research Methods

WWS = Writing with Style

<u>Date</u>	<u>Topic</u>	Readings/Assignments
Thursday 01/20	-Course Overview	-Syllabus
Week 1 Tuesday 01/25	-How do we know? -Prep for Lab 1	-Ch 1 (IRM) -Ch 2 (WWS); cell phone article
Lab 1	-Writing in Psychology	-Ch 2 (WWS)
Thursday 01/27	-How do we know? -Prep for Lab 2	-Ch 1 (IRM) -Ch 3 (WWS); cell phone article
Week 2 Tuesday 02/01	- How do we know?	-Ch 1 (IRM)
Lab 2	-Introduction – Cell Phone Paper	-Ch 1 (pp.7-10, WWS) & Ch 3 (WWS)
Thursday 02/03	-How do we find out? -Prep for Lab 3	-Ch 2 (IRM) -Ch 4 (WWS)
<u>Week 3</u> Tuesday 02/08	-How do we find out?	-Ch 2 (IRM)
Lab 3	-Method – Cell Phone Paper	-Ch 4 (WWS)
Thursday 02/10	-Validity, Reliability & Measurement -Prep for Lab 4	-Ch 3 (IRM) -Ch 5 (WWS)
Week 4 Tuesday 02/15	-Validity, Reliability & Measurement -Statistics Review	-Ch 3 (IRM) -Ch 10 (IRM)
Lab 4	-Results – Cell Phone Paper	-Ch 5 (WWS)
Thursday 02/17	-Statistics Review -Prep for Lab 5	-Ch 10 (IRM) -Ch 6 (WWS)

Week 5

Tuesday 02/22 -Statistics Review -Ch 10 (IRM)

-Finish Exam 1 Information & Review

Lab 5 -Discussion - Cell Phone Paper -Ch 6 (WWS)

Thursday 02/24 -Exam 1 (Chs. 1 – 3 & 10 IRM)

Week 6

Tuesday 03/01 -Psychological Measurement -Ch 4 (IRM)

-Possible Survey Project Topics

-Prep for Lab 6 -Chs 7 & 8 (WWS)

Lab 6 -Abstract & References - Cell Phone Paper - Chs 7 & 8 (WWS)

Thursday 03/03 -Psychological Measurement -Ch 4 (IRM)

-Prep for Lab 7 & Lab 8

Week 7

Tuesday 03/08 -Threats to Validity -Ch 5 (IRM)

Lab 7 & 8 -Writing Survey Questions &

Literature Review - Survey Project

Thursday 03/10 -Survey Project Questions

Week 8

Tuesday 03/15 -Survey Project Questions

Lab 7 & 8 -Literature Review – Survey Project

Thursday 03/17 -Threats to Validity -Ch 5 (IRM)

-Prep for Lab 9 (help with hypotheses)

Week 9

Tuesday 03/22 -Nonexperimental Research Designs -Ch 6 (IRM)

Lab 9 -Writing Hypotheses & Introduction – Survey Project

Thursday 03/24 -Nonexperimental Research Designs -Ch 6 (IRM)

03/28-04/01 SPRING BREAK NO CLASS, NO LAB

Week 10

Tuesday 04/05 -Prep for Lab 10

-Nonexperimental Research Designs -Ch 6 (IRM)

Lab 10 -Data Entry - Survey Project

Thursday 04/07	-Finish Exam 2 Information & Review -Prep for Lab 11	
Week <u>11</u> Tuesday 04/12	-Exam 2 (Chs. 4 – 6 IRM)	
Lab 11	-Method – Survey Project	
Thursday 04/14	-Experimental Research Designs -Prep for Lab 12	-Ch 7 (IRM)
<u>Week 12</u> Tuesday 04/19	-Experimental Research Designs	-Ch 7 (IRM)
Lab 12	- Results – Survey Project	
Thursday 04/21	-Experimental Research Designs -Prep for Lab 13	-Ch 7 (IRM)
Week 13 Tuesday 04/26	-Quasi-Experimental Research Designs	-Ch 8 (IRM)
Lab 13	-Discussion – Survey Project	
Thursday 04/28	-Quasi-Experimental Research Designs -Prep for Lab 14	-Ch 8 (IRM)
Week 14 Tuesday 05/03	-Choosing the Right Research Design	-Ch 9 (IRM)
Lab 14 (Last Lab)	-Abstract & References – Survey Project	
Thursday 05/05	-Choosing the Right Research Design	-Ch 9 (IRM)
<u>Week 15</u> Tuesday 05/10	-Review for Final Exam	
Week 16 Tuesday 05/17 -Final Exam (Chs. 7 – 9 & selected information from Exams *8:00 – 10:00am (assigned final exam time)		