PSY 301: Introduction to Research Methods in Psychology (4 units) San Diego State University

Spring 2011

INSTRUCTOR: Allison A. Vaughn, Ph.D.

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STUDENT HOURS: Tuesday/Thursday 9:30am-10:30am, LS-175 (or by appointment)

PHONE: 619.594.5536

LECTURE: Tuesday/Thursday 8:00am-9:15am (GMCS-214) **LECTURE TAs:** Corinne Burgamy (luckyi3@aol.com) **COURSE WEBSITE:** http://its.sdsu.edu/blackboard/

LAB (Sections 1 & 2): Thursday 11:00am-12:50pm (GMCS-428) **TA**: Raymond Covarrubias (raymondcovarrubias@gmail.com) **WEBSITE:** www.sci.sdsu.edu/classes/psy301/Vaughn_Raymond

LAB (Sections 3 & 4): Thursday 1:00pm-2:50pm (GMCS-428)

TA: Susan Drobka (susandrobka@gmail.com)

WEBSITE: www.sci.sdsu.edu/classes/psy301/Vaughn_Susan

"In science the credit goes to the man who convinces the world, not the man to whom the idea first occurs."

~~Sir Francis Darwin~~

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

LEARNING OUTCOMES:

Psy 301 Goals: By the end of this class you will know how to:

- 1. Use scientific method to answer questions about human behavior, specifically
 - Measurement issues, learning
 - to differentiate between constructs and observable behaviors
 - to develop operational definitions and observational strategies
 - to write good survey questions, and
 - 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 and
 - 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.

ISBN: 1111422389

• *Conducting research in psychology: Measuring the weight of smoke, 3rd ed.* Brett Pelham & Hart Blanton. Thomson-Wadsworth Publishing.

ISBN: 0-534-53294-2

• Writing With Style, 5th ed. Lenore T. Szuchman. Wadsworth Cengage Learning.

ISBN: 9780840031679

- Flash drive
- Lab manual. These pages will be available on Blackboard for download and printing.

CLASSROOM POLICIES:

- Attendance: We will be doing activities almost every class session and they will be worth points, so attendance is crucial.
- *Respect:* While in class (and lab), please show respect not only to the instructor but also to the other students—no cell phones, pagers, or two-way walkie-talkies. No texting, instant messaging, or ipods. Also, please be sensitive to the opinions of others by refraining from side conversations, interruptions, sleeping, etc. You will be asked to leave this classroom if you fail to show such respect.
- Exams: No late exams will be given without documentation (e.g., doctor's note). If you know that you will miss an exam, please make arrangements with the instructor at least 1 week prior to the exam. If you miss an exam without making prior arrangements, you will need appropriate documentation to take the exam. Make-up exams will be scheduled on a case-by-case basis.
- Assignments: All late assignments will have a maximum point value of half credit (without documentation), whether they are one hour late or one week late. All late assignments must be turned in by the last day of class (05/12/2011, by 12pm) to receive any points.

- *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.
- Students with disabilities: ADA/Accommodations: 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. SDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the SDS.
- 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 Office of Student Rights and Responsibilities. Students have the right to appeal such action in accord with the due process.

LABORATORY:

- You will be doing things a little differently than you did in Psy 271. A lab report is due at the end of each lab, and we have to insist that you do these reports in the lab. However, Psy 301 is an important course in the major, and so we need to know that people are doing the report and not just copying it from someone else. I'm sure you would be very irritated to learn that while you did all of your lab work conscientiously someone else just copied it from a friend.
- *Pre-Lab Assignments:* For each lab, you have a pre-lab assignment to complete *before* lab. The TAs 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. section in which you are officially enrolled.
 - Never insert your flash drive *before* you have mailed in your assignment. We will remind you about these rules, but be forewarned: if you insert a flash drive before mailing in your assignment, 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 or leave without doing the lab during the lab period, the lab report is still due but is worth only half the points.
 - **Revising labs.** We are going to let you revise one lab from the Cell Phone labs (Labs 2-6) and one lab from the Survey Project (Labs 7-14) for additional (**not the full number** of possible) **points**.

GRADES: A number of different activities will be graded in this class, including exams, lab work (cell phone paper and survey project), and in-class activities. These are detailed below.

- Exams. There will be two multi-format midterms (multiple choice as well as written responses) each worth 100 points. There will also be a cumulative final worth 150 pts. Like the midterms, the final will also be multi-format. All exams will include material from the book, the lab manual, and the writing manual, as well as from lecture and inclass activities.
- **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 (3 points of which are for the *Writing With Style* activities). These are available in the lab manual on Blackboard.
- **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 on Blackboard.
- In-class Activities. Research Methods is a "learning by doing" class and as such, we will be doing activities in almost every class meeting. These are meant to reinforce concepts and help prepare you for the exams. These activities will range in point value but will be worth a total of 90 points towards your total grade. There will be **no** make-up points for in-class activities—you must be present in class to earn these points.

Points	Grade Composition		Grade Rubric		
200	Midterms (2@100)	A	92-above	C	72-77
150	Final	A-	90-91	C-	70-71
90	Cell Phone Paper (6 @ 15)	B+	88-89	D+	68-69
96	Survey Project (8 @ 12)	В	82-87	D	62-67
90	In-class activities	B-	80-81	D-	60-61
626	Total Points	C+	78-79	E	59-below

SCHEDULE:

*Reading Assignment: CRP=Conducting Research in Psychology, WWS=Writing with Style

Date	Topic	Reading Assignment
-Thursday 01/20	-Introduction to the course	-Syllabus
(No Lab)		
Week 1 -Tuesday 01/25	-How do we know? Prep for Lab 1	-Ch 1 (CRP)
-Thursday 01/27	-Scientific writing	-Ch 9 (WWS)
Lab 1	-Writing in Psychology	-Cell phone article & Ch 2 (WWS)
Week 2 -Tuesday 02/01	-How do we find out? Prep for Lab 2, In-class activity (operational definitions)	-Ch 2 (CRP)
-Thursday 02/03	-Statistics review	-Ch 10 (CRP)
Lab 2	-Introduction-Cell Phone Paper	-Ch 1 (pp.6-10, WWS) & Ch 3 (WWS)
Week 3 -Tuesday 02/08	-In-class activity (stats), Prep for Lab 3	
-Thursday 02/10	-Validity, reliability, and measurement	-Ch 3 (CRP)
Lab 3	-Method-Cell Phone Paper	-Ch 4 (WWS)
Week 4 -Tuesday 02/15	-In-class activity (validity/reliability), Prep for Lab 4	
-Thursday 02/17	-Thursday 02/17 -Review for Midterm 1, Prep for Lab 5	
Lab 4	-Results-Cell Phone Paper	-Ch 5 (WWS)
Week 5 -Tuesday 02/22	-Midterm 1 (Ch 1-3, & 10 CRP; Ch 1-5 WWS)	

-Thursday 02/24	-Psychological measurement	-Ch 4 (CRP)
Lab 5	-Discussion-Cell Phone Paper	-Ch 6 (WWS)
Week 6 -Tuesday 03/01	-Return Midterm 1, Prep for Measurement Panel, Prep for Lab 6	-Measurement Panel article
-Thursday 03/03	-Measurement Panel (in-class activity)	-Questions for Panel
Lab 6	-Abstract & References-Cell Phone Paper	-Ch 7 & 8 (WWS)
Week 7 -Tuesday 03/08	-Overview of Survey Research project, In-class activity (survey topics), Prep for Lab 7 & 8	
-Thursday 03/10	-Nonexperimental research designs	-Ch 6 (CRP)
Lab 7 & 8	-Literature Review, Survey Questions, and Writing Hypotheses-Survey Project	
Week 8		
-Tuesday 03/15	-Survey research projects, Follow-up Lab 7 & 8	
-Thursday 03/17	-In-class activity (nonexperimental)	
Lab 7 & 8	-Literature Review, Survey Questions, and Writing Hypotheses-Survey Project	-Articles from Literature Review
Week 9 -Tuesday 03/22	-Survey research projects, Prep for Lab 9	
-Thursday 03/24	-Common threats to validity	-Ch 5 (CRP)
Lab 9	-Introduction-Survey Project	
03/28—04/01	SPRING BREAK—NO CLASS, NO LAB	
Week 10 -Tuesday 04/05	-More threats to validity, Prep for Lab 10	-Ch 5 (CRP)
-Thursday 04/07	-Review for Midterm 2, Prep Lab 11	-Study Guide
Lab 10	-Data Entry-Survey Project	-Bring finished surveys with you to lab

Week 11	Midton 2 (Ch 4 6 Joh manual)	
-Tuesday 04/12	-Midterm 2 (Ch 4-6, lab manual)	
-Thursday 04/14	Experimental research designs	-Ch 7 (CRP)
Lab 11	-Methods-Survey Project	
Week 12 -Tuesday 04/19	-Return Midterm2, Prep for Lab 12	-Ch 7 (CRP)
-Thursday 04/21	-In-class activity (experimental)	
Lab 12	-Results-Survey Project	
Week 13		
-Tuesday 04/26	-Factorial designs, Prep Lab 13, In-class activity (factorial)	-Ch 9 (CRP)
-Thursday 04/28	-No-class (Western Psych Association Convention—note, you do have lab)	
Lab 13	-Discussion-Survey Project	
Week 14		
-Tuesday 05/03	-Between- and within-subjects design, Prep Lab 14	-Ch 9 (CRP)
-Thursday 05/05	-Quasi-experimental research designs	-Ch 8 (CRP)
Lab 14	-Abstract & References-Survey Project	
Week 15		
-Tuesday 05/10	-In-class activity (quasi-exp)	
-Thursday 05/12	-Review for final exam	-Study Guide
Week 16 -Thursday 05/19 8am-10am	-Final Exam *Please make note, the final will be given from 8am to 10am, per the final exam schedule*	