

## **PSYCH 300: Experimental Psychology**

Lecture: MWF 9:30 - 10:25am -- Section 002; Class Number 3109

Spring 2009 – MAC 223

Lab: W 10:35 - 11:30am -- Section 02L; Class Number 3111

Spring 2009 – WH 321

**Professor:** Dr. Jennifer Zapf

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**Office hours:** MTWRF 8-9:15am & by appointment

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**Course description:** The purpose of this course is to provide you with an introduction to research methods used in psychology. Regardless of your career goals, the knowledge and skills you will gain in this course will be widely applicable in any scientific field. You will learn about the process of experimentation and scientific thought in psychological research, and how to apply this process to your own psychological research questions. You will learn how to plan, conduct, and analyze your own experimental research, and how to communicate the results of your research to others. Each major stage of research (formulating a research idea and design, collecting and analyzing data, and reporting the results) will take us through the course so that at the end of the semester each of you will have completed an entire experiment – from beginning to end. You will learn how to critically examine published research and will complete this course with the knowledge and skills to make a good consumer of psychological research.

### **This course meets the following Psychology Department Learning Outcomes:**

- **Research Methods in Psychology**

Students will understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.

- **Critical Thinking Skills in Psychology**

Students will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.

- **Values in Psychology**

Students will be able to weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline.

- **Information and Technological Literacy**

Students will demonstrate information competence and the ability to use computers and other technology for many purposes.

- **Communication Skills**

Students will be able to communicate effectively in a variety of formats.

**Course website:** Course announcements, grades, the syllabus, homework assignments, and other information relevant to the course will be posted on D2L: <https://uwgb.courses.wisconsin.edu>

Please look at the site regularly as ALL dates are tentative and are subject to change.

**Required text and Software:**

Martin, D. W. (2008). *Doing Psychology Experiments*. (7<sup>th</sup> ed.). Belmont, CA: Thomson Wadsworth.  
ISBN-10: 0-495-11577-0

Download the following FREE software:

APA Quick Reference Guide <http://www.docstyles.com/apaquick.htm>

**Optional text:**

*Publication Manual of the American Psychological Association* (5<sup>th</sup> ed.). 2001. Washington, D.C.: American Psychological Association. ISBN 1-55798-790-4

**Attendance & Class Expectations:** I expect that you will attend all classes and labs and come prepared to each class. I expect that during class you will use common courtesy by not text messaging or accessing online sites not pertinent to the current class work, etc. We will have computers in our lab class and I expect that you will use these computers only to accomplish class work and not to check your email or surf the web, etc. Should these expectations not be met, you may be asked to remove yourself from the classroom.

**Homework:** Homework is outlined in the attached schedule. Note some of these assignments are group assignments (GW) and some are individual assignments (IW). More information on each assignment will be either handed out in class or posted on D2L.

**Clickers:** We will be using clickers, aka, student response systems, in our class this semester. Clickers are small hand-held devices that allow all students in a class to “vote” or respond to survey and quiz questions presented in class. You will pick up your clicker on the third floor of the Cofrin Library at the Circulation desk. There will be signs indicating the exact location. You will check out a clicker just like you check out a library book. You will need to bring your student ID.

You must have a clicker by the end of the first week of class (Friday, January 30, 2009).

In an effort to keep costs low, you will be renting your clicker rather than purchasing it. The rental charge for the semester is \$20. Note that a student who loses or damages their clicker or fails to return it at the end of the semester will be invoiced \$50. The \$20 rental fee will appear on your student account in SIS; you will not pay the rental fee at the Library when checking out your clicker.

**The \$20 fee will appear on your record whether or not the clicker is checked out, so pick one up!** You need to have your own clicker. You cannot share one. Also, if you use clickers in two or more classes, you only need one clicker; you do not need a separate clicker for each class that uses one.

If you drop this class during the allowed drop period you must return the clicker to the library's circulation desk on the third floor to have the \$20 fee removed. This 100% refund period ends when the drop period ends. *If you did not check out a clicker before dropping, you still must notify Emily Rogers or Leah Smith at the library's circulation desk to have the fee refunded.* If you drop the class after the drop deadline you will still be charged for the \$20 rental fee. In all cases, you will be invoiced the full \$50 replacement fee if the clicker is not returned to the circulation desk in the library at the end of the semester.

We will be using the Turning Point XR model clicker with LCD display. Please do not attempt to use a clicker that was acquired outside of the library process described above. Only clickers acquired through the library are supported on campus.

Additional information can be found on the web at <http://www.uwgb.edu/learntech/CLICKERS/INDEX.htm>

**Readings and Clicker Quizzes:** Please complete the assigned readings prior to class. Keeping up with the reading will help you both get more out of class discussions and aid in your retention of the material. In addition, information from the readings will be on the exams. In order to facilitate the reading of the material prior to class, clicker quizzes will be administered during class time. The days in which clicker quizzes will take place are starred (\*) on the detailed schedule at the end of this syllabus. Note that in most cases these quizzes come on days when there is a reading assignment due. You will be allowed to drop your five lowest clicker quiz scores; only the 21 highest scores from the 26 clicker quizzes will count towards your final grade.

The clicker quizzes may take various forms, such as four questions at the beginning of class, four questions at the end of class, or four questions presented throughout the lecture. The questions will appear in a variety of formats, such as true/false and multiple choice. The problems on the clicker quizzes will provide you with an opportunity to test whether or not you really understand the material you have read (and in some cases the material elaborated upon in class). In addition, the problems will be very similar to those that appear on the exams and, thus, the clicker quizzes will provide you with experience with the type of questions you will see on exams.

**Group Research Project and Poster Presentation:** The research project for this class is a **group** project. Groups must consist of 4 people. Throughout the semester you will be asked to evaluate how much effort/time/etc. each group member contributes to this group project. The total project is considered to be 100% -- so if 4 group members contributed equally, all would contribute 25%. If one group member contributed only a little and three group members contributed a lot, one group member might receive 10% whereas the other three group members would each contribute 30%.

**Oral Defense:** You will be provided with a list of questions that you should be prepared to answer orally regarding your research project. I will randomly select a question(s) to ask each person in front of the class. You will be graded on the content of your answer, your preparation, and the quality of your oral communication.

**Final Paper:** You will write up your research project in APA format including a title page, abstract, introduction, method, results, discussion, and references. You will be graded on the content of your paper, the quality of your writing, and APA formatting.

**Please note:** All individual work must be handed in typed and must be completed in your own words. If you copy from the text, a website, a classmate, or in any way turn in an assignment/quiz score that is not written in your own words, you will receive a zero on that assignment. More information for students at: <http://webster.comnet.edu/mla/plagiarism.shtml>

**From the University:** As required by federal law and UW-Green Bay policy for Individuals with Disabilities, students with a documented disability who need accommodations must contact the Disability Services Office at 465-2841. Reasonable accommodations can be made unless they alter the essential components of the class. Contact should be made with the Disability Services Office and the instructor during the first week of class.

*I reserve the right to modify the course requirements and/or schedule as deemed appropriate and with reasonable notice of such revisions.*

**Grading:**

21 clicker quizzes @ 4 points each	84 points
*five lowest scores are dropped	
IWN1: Mainstream Media	20 points
IWN2: IRB Ethics Training	10 points
IWN3: Literature Search and Research Proposal	25 points
IWN4: Formation of the Research Idea for Final Project	20 points
GWN1: Final IRB Proposal	25 points
IWN5: Literature Review 2 <sup>nd</sup> Article	20 points
IWN6: Introduction/Methods Draft	20 points
IWN7: Graphs and Statistical Reporting	20 points
IWN8: Results/Discussion Draft	20 points
Oral Defense (Individual)	20 points
Poster Presentation (Group)	20 points
Final Paper (Individual)	50 points
Midterm Exam (Individual)	50 points
Final Exam	<u>50 points</u>
	454 points

Grades will be assigned in the following manner:

A	93-100%	B	83-87%	C	73-77%	D	60-67%
A/B	88-92%	B/C	78-82%	C/D	68-72%	F	<60%

**Class Schedule**

Day	Date	Topic	Reading	Assigned	Due
		<b>WEEK ONE:</b>			
M LEC	1/26	Introduction to Course		IWN1: Mainstream Media 20 pts	
W LEC	1/28	Psychology as a Science	Martin – Ch. 1		
<b>W LAB</b>	<b>1/28</b>	<b>A Real-Life Experiment</b>			
F LEC	1/30	Psychology as a Science	Martin – Ch. 1		IWN1: Mainstream Media 20 pts
		<b>WEEK TWO:</b>			
M	2/2*	Ethics, Part One: How to be Fair with Participants	Martin – Ch. 4	IWN2: IRB Training – 10 pts	
W LEC	2/4	Quiet Rage: The Stanford Prison Experiment			
<b>W LAB</b>	<b>2/4*</b>	<b>Quiet Rage: The Stanford Prison Experiment Discussion/ Group work</b>			
F LEC	2/6*	Ethics, Part Two: How to be Fair with Science	Martin – Ch. 5		IWN2: IRB Training – 10 pts

		<b>WEEK THREE:</b>			
M LEC	2/9*	How to Get an Experimental Idea	Martin – Ch. 3		
W LEC	2/11*	How to Find Out What Has Already Been Done	Martin – Ch. 6		
<b>W LAB</b>	<b>2/11</b>	<b>Searching Through the Literature</b>		IWN3: Literature Search 25 pts	
F LEC	2/13*	How to Do Experiments	Martin – Ch. 2		
		<b>WEEK FOUR:</b>			
M LEC	2/16*	Research Design I: Independent and Dependent Variables	Martin – Ch. 7		IWN3: Literature Search 25 pts
W LEC	2/18	Experimental Groups: Presentation of Ideas			
<b>W LAB</b>	<b>2/18</b>	<b>Experimental Groups Formed</b>		IWN4: Research Ideas 20 pts	
F LEC	2/20*	Research Design II: Operational Definitions	Martin – Ch. 7		
		<b>WEEK FIVE:</b>			
M LEC	2/23*	Research Design III: Between-subjects vs. Within-subjects	Martin – Ch. 8		IWN4: Research Ideas 20 pts
W LEC	2/25*	Writing IRB Proposals <a href="http://www.uwgb.edu/irb">www.uwgb.edu/irb</a>	Review website		
<b>W LAB</b>	<b>2/25</b>	<b>Your Research Design</b>		GWN1: IRB Proposal 25 pts	
F LEC	2/27*	Research Designs IV: Reliability and Validity	Martin – Ch. 7		
		<b>WEEK SIX:</b>			
M LEC	3/2*	More Complex Designs I: Single-Variable, Multiple-variable, and Converging-Series Experiments	Martin – Ch. 9		GWN1: IRB Proposal Draft
W LEC	3/4*	More Complex Designs II: Non-Experimental Research	Martin – Ch. 10		
<b>W LAB</b>	<b>3/4</b>	<b>Finalize IRB Proposal</b>			GWN1: IRB Proposal 25 pts
F LEC	3/6*	Writing the Method Section	Martin – Ch. 13: 277-279; Handout		

		<b>WEEK SEVEN:</b>			
M LEC	3/9*	Catch-up & Review Experimental Design			
W LEC	3/11	<b>MIDTERM</b>			
<b>W LAB</b>	<b>3/11</b>	<b>Project design</b>			
F LEC	3/13	Project design			
	3/14-22	<b>**SPRING BREAK**</b>			
		<b>WEEK EIGHT:</b>			
M LEC	3/23*	Anatomy of a Research Article	Martin – Ch. 13, esp. 282-299		
W LEC	3/25*	Writing The Literature Review	Martin – Ch. 13: 277 & Handout		
<b>W LAB</b>	<b>3/25</b>	<b>Literature Review</b>		IWN5: Literature Review 20 points	
F LEC	3/27*	Pilot Testing	Martin – Ch. 11		
		<b>WEEK NINE:</b>			
M LEC	3/30*	Pilot Testing			IWN5: Literature Review 20 points
W - F	4/1 – 4/3	**I will be at a conference; classroom/TA will be available for experiment prep.		Make changes to experimental procedure based on feedback from pilot; Work on IWN6: Introduction/Methods Draft – 20 points	
		<b>WEEK TEN:</b>			
M LEC	4/6 *no class	<b>DATA COLLECTION: Tuesday, 4/7/09 4-6pm</b>			
W LEC & LAB	4/8	<b>DATA COLLECTION: Wednesday, 4/8/09 9:30-11:30am</b>	*IWN5 - Literature Review returned		
F LEC	4/10*	Data entry instruction Descriptive Statistics	Martin – Ch. 12: 240-251 Appendix A: 309-313	Data entry	

		<b>WEEK ELEVEN:</b>			
M LEC	4/13*	Inferential Statistics	Martin – Ch. 12: 253-267; Appendix A: 316-317	IWN7: Graphs and Stats 20 points	IWN6: Introduction/Methods Draft – 20 points
W LEC	4/15*	How to Interpret Experimental Results	Martin – Ch. 12		
<b>W LAB</b>	<b>4/15</b>	<b>Data analysis</b>			Data entry
F LEC	4/17*	Writing the Results Section	Martin – Ch. 13: 279-281 Handout	IWN8: Results/Discussion Draft – 20 points	IWN7: Graphs and Stats 20 points
		<b>WEEK TWELVE:</b>			
M LEC	4/20*	Writing the Discussion Section	Martin – Ch. 13: 281 & Handout		
W LEC	4/22*	Public Presentation of Results Intro/Methods Questions	Martin – Ch. 13: 300-307  *Intro/Methods Draft Returned		
<b>W LAB</b>	<b>4/22</b>	<b>Final Paper Oral Defense/Poster Preparation</b>			
F LEC	4/24	Writing the Abstract			IWN8: Results/Discussion Draft 20 points
		<b>WEEK THIRTEEN:</b>			
M LEC	4/27	Final Projects **Title page/references			
W LEC	4/29*	TA Lecture			
<b>W LAB</b>	<b>4/29</b>	<b>Final Paper Oral Defense/Poster Preparation</b>			
F LEC	5/1	Final Projects Results/Discussion Questions	*Results/ Discussion Draft Returned		
		<b>WEEK FOURTEEN:</b>			
M LEC	5/4	<b>Oral Defense</b>			
W LEC	5/6	<b>Oral Defense</b> Final Exam Preparation			
<b>W LAB</b>	5/6	<b>Final Paper Poster Preparation</b>			
F	5/8 3-5pm	<b>Poster Session</b>	Phoenix Rm B		<b>Final Paper Due 50 Points</b>
W	5/13	<b>Final Exam 8:00 – 10:00am</b>			