

## Psychology 301 - Research Methods in Psychology Lab Fall 2009

Section 209 - Tuesday 5:30 - 7:20pm, Innovation Hall 333

Section 210 - Tuesday 7:30 - 9:20pm, Innovation Hall 333

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**Office Hours:** TBA and by appointment

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\* I can only respond to emails from your official GMU email addresses, per university policy, so please only email me from those accounts.

### Texts

- Dunn, D. S. (2008). *A Short Guide to Writing about Psychology*. New York: Pearson education.
- Shaughnessy, J. J., Zechmeister, E. B., & Zechmeister, J. S. (2009). *Research Methods in Psychology*.
- OPTIONAL: Publication Manual for the American Psychological Association (6th edition).

### Course Goals

- To develop understanding of experimental design in psychology
- To learn and practice scientific writing using APA format
- To develop understanding of basic statistics in research design
- To appreciate and understand experimentation in psychology

Note: This lab course fulfills the Writing Intensive requirement in the psychology major. It does so through one full APA papers and a research proposal (paper 1 and the final proposal). Each assignment is completed through a draft/feedback/revision process. The schedule of due dates is on the syllabus. It is required that students successfully complete all written assignments in order to meet the writing intensive requirement. Students who fail to meet the writing intensive requirement will not pass the course.

### Grading

Grading will be based on course attendance, participation, in-class activities, quizzes, and homework assignments. The assignments for this course are described in further detail on the next page.

**Note on Academic Honesty:** Lab reports are expected to be each student's own work. Students may use books, notes, and other sources in preparing lab reports. Students should not collectively write papers with another student. Plagiarism of any kind will not be tolerated, and appropriate consequences (per university policy) will follow. All work submitted should be **each student's own work**. Quotations in lab reports and papers should be minimal and follow appropriate citation guidelines.

**Disability Accommodations:** If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at (703) 993-2474. All academic accommodations must be arranged through that office.

### **Grading Breakdown**

Points in this class comprise course attendance, participation in in-class activities, quizzes, homework assignments, and major papers.

*Attendance and Participation:* Each student can earn up to 50 points for participation and attendance. The remaining points will be a participation grade based on participating in class discussions and asking questions.

*In-Class Activities:* Throughout the semester, there will be several activities that will be done in class, such as in-class writing, peer/group reviews and writing, participating in the in-class experiments, participation in class discussions, and experimental design critiques/discussions. You must be in class in order to receive credit for these activities.

*Quizzes:* Two in-class quizzes will be given during the semester. These cannot be made up.

### **Tentative Point Values for Each Assignment in Psychology 301 Labs**

*Class participation* 50 points

Class participation includes in-class writing, peer/group reviews and writing, participating in the in-class experiments, participation in class discussions, and experimental design critiques/discussions.

*Critique* 15 points

*Quizzes (2, 10 points each)* 20 points

*Observation assignment data collection* 10 points

*Observation write-up (Method & Results Sections)* 10 points

*Survey write-up  
(Method and Results Sections)* 15 points

*Introduction Draft (Paper 1)* 20 points

*Discussion Draft (Paper 1)* 10 points

*Completed Paper 1* 100 points

*Abstract Draft (Final Proposal)* 10 points

*Proposal Draft*

*15 points*

*Final Proposal*

*100 points*

*Final Proposal Presentation*

*25 points*

### Course Schedule

Week	Date	Class Activity	Assignment (due next week)
1	9/1	<ul style="list-style-type: none"><li>• Go over syllabus, details of the lab.</li><li>• Brief overview of the “nuts and bolts” of research design.</li><li>• Description of library resources</li></ul>	<ul style="list-style-type: none"><li>• Find and read Darley and Latané (1968)</li><li>• Page 46-52; 115 in Dunn</li><li>• Journal Critique</li></ul>
2	9/8	<ul style="list-style-type: none"><li>• Discuss Darley and Latané article</li><li>• Measuring behavior through observational research</li><li>• Descriptive statistics and inter-rater reliability</li><li>• Small group discussion about upcoming study.</li></ul>	<ul style="list-style-type: none"><li>• Conduct and complete observational study before next week</li><li>• Bring in collected data along with a summary of the data</li></ul>
3	9/15	<ul style="list-style-type: none"><li>• APA format</li><li>• Writing a method and results section</li><li>• Methods and results section workshop</li></ul>	<ul style="list-style-type: none"><li>• Final copy of method and results for the survey study written on your own</li><li>• Read pages 93-99 in Dunn as a resource</li></ul>
4	9/22	<ul style="list-style-type: none"><li>• Correlational and survey research</li><li>• Entering data</li></ul>	<ul style="list-style-type: none"><li>• None!</li></ul>
5	9/29	<ul style="list-style-type: none"><li>• Discuss survey results</li><li>• Discuss method and results section from last week</li><li>• In-class experiment</li></ul>	<ul style="list-style-type: none"><li>• Method and results section for in-class survey study</li><li>• Chapter 6 in Shaughnessy and 58-63 in Dunn</li><li>• Read “Writing the Empirical Journal Article” (Bem, 2003)</li></ul>
6	10/6	<ul style="list-style-type: none"><li>• Writing an introduction section</li><li>• Outlining an APA paper</li></ul>	<ul style="list-style-type: none"><li>• Rough draft of introduction from in-class experiment</li><li>• Obtain/read main article and three other related articles</li></ul>

<b>Week</b>	<b>Date</b>	<b>Class Activity</b>	<b>Assignment (due next week)</b>
7	10/13	NO CLASS	•
8	10/20	<ul style="list-style-type: none"> <li>• Experiment results</li> <li>• Method sections</li> <li>• Discussion sections</li> </ul>	<ul style="list-style-type: none"> <li>• Pages 99-102 in Dunn</li> <li>• Rough draft of discussion section</li> <li>• Begin writing other sections</li> </ul>
9	10/27	<ul style="list-style-type: none"> <li>• Peer review discussion sections</li> </ul>	<ul style="list-style-type: none"> <li>• Finish full paper for next week</li> </ul>
10	11/3	<ul style="list-style-type: none"> <li>• Discuss ideas/designs for final proposals in small groups</li> <li>• How to develop a research question and design a study</li> </ul>	<ul style="list-style-type: none"> <li>• Begin literature search; bring five relevant abstracts and brief summary paragraphs next week</li> </ul>
11	11/10	<ul style="list-style-type: none"> <li>• Discuss final assignment</li> <li>• Discuss proposal topics with me (final proposal topics MUST be approved by me)</li> </ul>	<ul style="list-style-type: none"> <li>• Write an abstract or outline for your proposal</li> </ul>
12	11/17	<ul style="list-style-type: none"> <li>• Present abstracts</li> </ul>	<ul style="list-style-type: none"> <li>• Begin work on rough draft</li> </ul>
13	11/24	<ul style="list-style-type: none"> <li>• Discuss problems/progress on proposals</li> <li>• Addressing writing difficulties</li> </ul>	<ul style="list-style-type: none"> <li>• Rough draft of proposal is due next week</li> </ul>
14	12/1	<ul style="list-style-type: none"> <li>• Bring several copies of rough draft for peer critique</li> <li>• Discuss class presentations</li> </ul>	<ul style="list-style-type: none"> <li>• Finish final proposal for next week</li> <li>• Prepare at least one Powerpoint slide for presentation</li> </ul>
15	12/8	<ul style="list-style-type: none"> <li>• Presentations of final proposals</li> </ul>	<ul style="list-style-type: none"> <li>• Enjoy your break</li> </ul>

## Final Proposal Guidelines -Psychology 301

The last/second full writing assignment project is to be a proposal for an experiment that is original (or a partial replication) experiment relevant to topics in psychology. The student may “propose” a project from any area of psychology. Correlational or observational studies are acceptable but studies with at least one variable to manipulate are encouraged.

Students are required to write the proposal using APA format. A minimum of **five** references is required. The proposals must be projects that are plausible in that the project could realistically be completed. For example, if I wanted to test 100 amnesic patients, it would not be plausible because it would be extremely unlikely that I would have access to 100 amnesic patients.

Since this is a proposal of research to be conducted in the future, the paper should be written in the **future tense**: Below are a few examples:

- a. “The present project is designed to investigate whether older and younger adults differ in their memory for verbal material”
- b. “The participants will be tested in groups of 6-10 in a laboratory setting.”
- c. “Participants will be presented with lists of words from.....”

### The proposals must include the following:

1. An **Introduction** section that states the main area of the proposed research and then includes a review of the relevant literature that is directly related to the proposed research plan. It should also state the research question of interest and then state the hypothesis, usually at the end of the introduction.
2. A **Method** section that includes a Design section (e.g., a 2 X 2 mixed factorial), Participants section, Materials section and Procedure section. All of the sections should be written in appropriate APA format.
3. An **Analysis Plan** section should briefly describe how the data would be analyzed and what the expected result might be based on the hypothesis. For example, if a correlational study is done, the student would write something such as “A Pearson-product correlational analysis will be conducted to determine the strength and direction of the correlation between anxiety and depression. It is expected that the correlation between these variables would be..... because.....” This part should have only a few sentences.
4. A **Conclusion** section (based on potential/possible outcomes) should include the following:
  - a. What would this research contribute to the literature if the hypothesis were supported?
  - b. A discussion of what would be done next if the hypothesis were supported. In other words, what would be the next step in the research or what would the researcher do next.
  - c. Additional ideas if the hypothesis were not supported could be added. Of course, this would be hypothetical.
  - d. Limitations of the study.
  - e. This should be only a paragraph or two at most.

5. An **Abstract** should be included as well. Students will include an expected outcome rather than a real outcome. Again the text should be written in the future tense. For example, “It is expected that older adults would recall fewer words than younger adults.”  
**(Note: This section should be only one or two paragraphs and does not have to be extensive.)**

All students must attach the measures/materials to be used (e.g., a survey). An exception will be made if the survey would have to be purchased by the student. However, this is a rare exception.

### Point Guidelines for First Full Paper

#### Point guideline for Paper 1

Title page	2 points
Abstract	10 points
Introduction	25 points
Method	<u>18 points</u> (total)
<i>Design</i>	2 points
<i>Participants</i>	2 points
<i>Materials/Apparatus</i>	4 points
<i>Procedure</i>	10 points
Results - written	12 points
Figure/Table	6 points
Discussion	12 points
Reference Page	5 points
Overall paper quality	10 points

#### Point Guideline for Final Proposal Assignment

Abstract	5 points
Introduction	35 points
Hypothesis	5 points
Method	30 points
Results/analysis plan and expected outcome	5 points
Potential Conclusions	5 points
References	5 points
Overall paper quality	10 points