# PSYCHOLOGY 301 LAB SYLLABUS RESEARCH METHODS IN PSYCHOLOGY

Summer 2006, Mon, Wed / Tues, Thurs 12 – 2:50

Instructor: Amanda Cassell Office Hours: to be held in Jazzman's Café Coffee Shop on the Ground Floor of the JC Monday 3:00-4:00pm, or by appointment. Mailbox: labeled "Cassell" and located in hallway of David King Hall Office: Adjunct Faculty Office, Thompson Hall, Room 131 E-mail: adibart@gmu.edu (email is the best way to reach me) Phone: (703) 993-1349

### **TEXTS & MATERIALS**

- Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2006). *Research Methods in Psychology* (7<sup>th</sup>edition).Boston:McGraw-Hill Higher Education.
- Dunn, D. S. (2004). A Short Guide to Writing about Psychology. New York: Pearson Education, Inc.
- You will be required to print full-text research articles
- \*Recommended (especially if you anticipate attending graduate school in psychology): Publication Manual for the American Psychological Association (5<sup>th</sup> edition).
- Computer disks (A:), or blank CDs (for turning in homework assignments)

# **COURSE GOALS**

- Understand the role of experimentation in psychology and learn about experimental design
- Understand and apply statistical principles in research design (not calculation of statistics per se)
- Learn how to access and use psychological databases (e.g., E-Journal Finder and psycINFO)
- Gain experience proposing and conducting your own psychological research
- Learn how to write a scientific report in APA format

# **EXPECTATIONS**

I expect all students to attend lab, show up on time, and complete all assignments in a timely manner. To maintain a respectful learning environment please arrive on time (to lab or appointments with me), turn off your cell phones in lab, and refrain from engaging in activities on the computer not directly related to lab. It is my goal to be as available to you as possible to answer any questions, address concerns, review concepts, etc. Please do not hesitate to email me, but give me at least 24 hours to respond to any question/issue/inquiry (i.e. no midnight emails expecting an answer by 2am).

# **POLICIES**

Lab attendance is very important and strongly encouraged. **If a student misses an in-class assignment or experiment, this cannot be made up at a later date**. Homework assignments must be handed in THE DAY THEY ARE DUE! I will ONLY accept homework assignments BEFORE 12 pm (noon) on the day they are due. If a student cannot attend class and wishes to turn in a homework on-time, the assignment must emailed to me prior to the beginning of the class in which the assignment is due. All homework assignments are due within the first 10 minutes of the lab period.

Writing assignments (except for assignments involved in peer critiques – which must be emailed to me in addition to bringing a printed copy to class – and Paper 1 and the final Proposal) are due in electronic format to aide both the students and instructor in communicating feedback. Students must turn in written assignments either via email, on a burned CD, or on a floppy disk. Written assignments will be returned via GMU email. Per university policy, it is your responsibility to check this email account regularly. Writing assignments must be typed and double spaced, in 12pt font with 1inch margins. The only acceptable fonts for submitted assignments are Times New Roman or Arial. Since spelling and grammar check is available on word processing systems, any errors of this type will count heavily against the grade.

<u>One more note about absences</u>: If you miss a class, YOU are responsible for the material covered and announcements made in your absence. I would suggest exchanging email addresses or phone numbers with at least 2 of your classmates on the first day of lab in the unlikely event that you are absent and need to know what you missed. This is a writing intensive course in an accelerated format – it is to your benefit to ensure you are able to attend every lab.

# HONOR CODE

All provisions of the GMU Honor Code will be followed in this class. Although student discussion is encouraged, and labs will sometimes involve group work, all writing assignments must be completed individually. Lab papers are expected to be the student's own work. Students may use books, notes, and consult other sources in preparing lab reports. Under no circumstances are you to collectively write papers with another student. This is considered to be plagiarism and plagiarism of any kind will not be tolerated. Work such as library references, statistics, and reports of the research studies should be each student's own work. Quotations in lab reports should be minimal and the appropriate citation must be given.

# Writing and Technology

PSYC 301 is an approved writing intensive course. This means that in the laboratory you will have multiple writing assignments that build upon one another and that the total amount of writing equals or exceeds GMU's specified minimum. The lab will include on-line searches using PsycINFO, and other electronic databases, meeting part of the technology-across the curriculum requirement. Most extra-class communications will be completed by e-mail, including returning assignments and providing outlines for class notes and other required course material. Per university policy, it is your responsibility to check your GMU email account regularly. If you are uncomfortable with any of the technology required in this course, I would suggest going to the STAR center: <u>http://media.gmu.edu/</u>.

# **Students with Disabilities**

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

# **GRADING CRITERIA**

# Lab counts for 40% of the total grade in 301. (A total of 400 points is possible)

Class Participation	45 points
In-class assignments, experiments, & discussion, and peer/group reviews & design critiques	
Article (TBA) Reading Assignment Quiz	10 points
Textbok Ch. 14 Quiz	10 points
Observation Write-up (method & results section)	20 points
Survey Write-up (method & results section)	20 points
PAPER 1	
Draft of Introduction	25 points
Draft of Discussion	20 points
Draft of entire paper	Extra Credit
Completed Paper	100 points
FINAL PROPOSAL (see page 4 for detailed instructions)	
Articles & Summaries	10 points
Outline of final proposal	10 points
Draft of Proposal	Extra Credit
Completed Final Proposal	100 points
Presentation of Final Proposal to Class	30 points

### **IMPORTANT DATES**

Last Day to Add: July 11 Last day to drop: July 14

# **COURSE OUTLINE**

Date	Class	Assignments (Due the following
	<u>Underline = assignments returned (via email)</u>	week)
	<b>Bold = In Class Activity</b> Italics = Assignment Due	
Day 1 July 6 July 7	<ul> <li>Syllabus</li> <li>Goals of the lab</li> <li>Components of a Research Article</li> <li>How to Read a Research Article</li> </ul>	<ul><li>Read Research Article (TBA)</li><li>Study for quiz on article</li></ul>
	Description of library resources, both in the library and online	
Day 2 July 10 July 11	<ul> <li>Class Discussion of Article</li> <li>Quiz on article</li> <li>Observational research with and without intervention</li> <li>Operational definitions</li> <li>Descriptive statistics (mainly means).</li> <li>Inter-rater reliability</li> <li>APA format &amp; Different sections of an APA-style paper.</li> <li>How to write the Method and Results sections of an APA paper</li> <li>Small group discussion about observational study (+ Worksheet)</li> </ul>	<ul> <li>Conduct observational study.</li> <li>Write Method and Results of Observational Study</li> </ul>
Day 3 July 12 July 13	<ul> <li>Correlations and correlational research</li> <li>Review APA style, Ch 14</li> <li>Complete Surveys</li> <li>Turn in observational study Method and Results section</li> </ul>	• Study for Quiz on Ch 14
Day 4 July 17 July 18	<ul> <li>Quiz Ch. 14</li> <li><u>Return completed method and results sections from observational study</u></li> <li>Discussion of survey results; discuss common Method/Results mistakes</li> <li>Class Experiment (basis for paper #1)</li> <li>Explanation of the class experiment's theoretical and empirical background</li> <li>Literature review in APA-style papers</li> </ul>	<ul> <li>Print and read "<i>class experiment/paper #1</i>" foundational article, plus 1 other article.</li> <li>Obtain and read 2 more pertinent articles</li> <li>Write method and results section for correlational study.</li> </ul>
Day 5 July 19 July 20	<ul> <li>Review foundational article</li> <li>Go over results from class experiment/paper #1 data</li> <li>Workshop on writing an introduction</li> <li>Workshop on writing a discussion section</li> <li>Turn in method and results section from correlational study</li> </ul>	<ul> <li>Write draft of intro section for paper #1</li> <li>Write draft of discussion section for paper #1</li> <li>*Extra Credit: bring in draft of final version of paper 1 for peer review</li> </ul>
Day 6 July 24 July 25	<ul> <li><u>Return completed method and results section from correlational study</u></li> <li>Peer critique of introduction &amp; discussion &amp; Peer Review of Drafts (extra credit)</li> <li>Discuss ideas for final proposal</li> <li>Final Proposal topics worksheet</li> <li>Turn in draft of introduction and discussion for paper #1</li> </ul>	<ul> <li>Obtain at least 5 relevant full-text articles for final proposal. Print out abstracts to turn in</li> <li>Complete final version of Paper 1</li> </ul>
Day 7 July 26 July 27	<ul> <li><u>Return completed introduction &amp; discussion sections</u></li> <li>Workshop on Writing an Outline for Final Proposal</li> <li>Turn in article references and abstracts for final proposal</li> <li>Turn in final version of paper #1</li> </ul>	• Summary of proposal and Outline of final proposal (Required) or Rough Draft of Final Proposal (Extra Credit)
Day 8 July 31 August 1	<ul> <li><u>Return and discuss Paper 1</u></li> <li><u>Return and discuss final proposal abstracts</u></li> <li>Discuss Presentations</li> <li>Writing workshop: Outlines (required) or Rough Draft (extra credit)</li> <li><i>Turn in Summary and Outline of Proposal (required) or Rough Draft of Proposal (extra credit)</i></li> </ul>	<ul><li>Final Proposal</li><li>Presentation</li></ul>
Day 9 August 2 August 3	<ul> <li>Student presentations of final proposal</li> <li><i>Turn in final proposal</i></li> <li>te: This is a tentative schedule, and tonics and assignments are sub-</li> </ul>	ject to change. Any changes will

\*Note: This is a tentative schedule, and topics and assignments are subject to change. Any changes will be announced in class\*

### **Final Proposal Assignment - Psychology 301**

The last/second full writing assignment project is to be an original experimental proposal or partial-replication of an 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 a proposal using APA format. A minimum of **five primary** 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 adults recall more items than younger adults."
- b. "The participants will be tested in a laboratory setting."
- c. "Participants will be presented with lists of words from....."

#### All of the sections should be written in appropriate APA format. The proposals must include the following:

- 1. An **Introduction** section that introduces the question/problem and includes a review of the literature (minimum of 5 references) relevant to the topic. The hypothesis should also be stated at the end of the introduction.
- 2. A Method section that includes the design (e.g., a 2 X 2 mixed factorial), participants, materials and procedure.
- 3. A **Results** section should briefly describe how the data *would* be analyzed and what the expected result *would* be based on the hypothesis. For example, if a correlational study is proposed, 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. This is likely because ......"
- 4. A **Discussion/Conclusion** section 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. A critique of their own design or the limitations of the study.

### (Note: this section should be only one or two paragraphs and does not have to be extensive.)

5. An **Abstract** should be included as well. Students may include an expected outcome rather than a real outcome. Again the text should be written in the future tense. For example, "It would be expected that older adults would recall fewer words than younger adults."

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.

When the final proposals are turned in, students must include the following:

- a. A copy of all articles referenced in the report, copies of the measures, etc. mentioned above
- b. Two copies of the final paper. If all of these are not included, there will be a grade reduction.

#### **Final Presentation**

Each student is required to present the proposal to his/her classmates the last day of lab class. It is an opportunity for students to demonstrate to their classmates what kind of research they are interested in and what they think the study would reveal. This presentation should be considered as an informal conversation with their classmates as well as a good opportunity to "practice" speaking in front of others.

All materials will be returned to the students at the end of the semester. We keep copies of all papers written in Psychology 301 to minimize plagiarism and to use in writing assessments for the university.