PSYCHOLOGY 301 LAB SYLLABUS RESEARCH METHODS IN PSYCHOLOGY

Spring 2006: Monday 8:30am-10:20am (201), 10:30am-12:20pm (202)

Instructor: Megan Wagner E-mail: mwagner6@gmu.edu

Office: Adjunct Faculty Office, Thompson Hall, Room 131

Office Hours: Thursdays 2-3pm or by appointment Phone Number: (703) 993-1349 (email is preferred)

Mailbox located in hallway of David King Hall in adjunct faculty section

TEXTS & MATERIALS

- Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2006). *Research Methods in Psychology* (7thedition). Boston: McGraw-Hill Higher Education.
- Publication Manual for the American Psychological Association (5th edition).
- Thaiss, C., and Sanford, J.F. (2000). Writing for Psychology. Boston: Allyn & Bacon. (recommended)
- Computer disk or jump/flash drive in order to save any computer work completed in lab (recommended)

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. I assume you are all mature, responsible college students who are respectful of your classmates and of me. This means showing up on time (to lab or appointments with me), turning off your cell phones in lab, and generally encouraging a good learning environment. It is my goal to be as available to you as possible to answer any questions, address concerns, review concepts, etc. That said, please give me at least 24 hours to respond to any question/issue/inquiry.

POLICIES

- Lab attendance is very important and strongly encouraged. Students will receive participation grades, which account for a substantial portion of the final lab grade. Students are responsible for all materials, assignments, and announcements covered in the lab. I would suggest exchanging email addresses or phone numbers with at least 2 of your classmates in the unlikely event that you are absent and need to know what you missed.
- 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; no late assignments will be accepted. All homework assignments are due within the first 10 minutes of the lab period. You must give me HARD COPY of all assignments you turn in.
- 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. If you know in advance you'll be absent, *please* leave a hard copy of the assignment in my mailbox **in addition to** emailing it to me.
- 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. Save all of
 your corrected assignments; you may be required to turn in corrected drafts along with final copies of
 papers.
- Snow days/School closings: If the GMU campus closes on a class day that you are to turn in a writing assignment, you must STILL email me that writing assignment by 5pm THE DAY IT IS DUE. You must then have a paper copy of that same e-mailed assignment turned in to my mailbox no later than 5pm the first day

that campus re-opens (mostly likely the following day). Changes made between emailing me your assignment and turning in a hard copy will be considered a violation of the honor code

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 reports are expected to be the student's own work. Students may use books, notes, and 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 & 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. If you feel you would benefit from additional assistance with writing, please see http://writingcenter.gmu.edu/. The lab will include an introduction to Statistical Package for the Social Sciences (SPSS) and 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. If you are uncomfortable with any of the technology required in this course, I would suggest going to the STAR center: http://media.gmu.edu/. Finally, important course material (e.g., class notes/outlines) will be posted at http://mason.gmu.edu/~lbrookss/301lab.htm. It is the student's responsibility to acquire information from this site.

<u>ADDITIONAL INFORMATION</u>: 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 425 points is possible)

| Class Participation | 60 points |
|---|--------------|
| In-class assignments, experiments, & discussions; peer/group reviews, & design critique | S |
| APA Manual Ch. 2 quiz | 10 points |
| Observation Data Collection (design sheet, data and summary) | 15 points |
| Observation Write-up (method & results) | 20 points |
| Survey Write-up (method and results section) | 20 points |
| PAPER 1 | • |
| Draft of Introduction | 25 points |
| Draft of Discussion | 10 points |
| Data Collection | 10 points |
| Draft of entire paper | Extra Credit |
| Completed Paper | 100 points |
| FINAL PROPOSAL (see page 4 for detailed instructions) | |
| Articles & Summaries | 10 points |
| Draft of Abstract | 10 points |
| Outline of final proposal | 10 points |
| Draft of Proposal | Extra Credit |
| Completed Final Proposal | 100 points |
| Presentation of Final Proposal to Class | 25 points |
| | |

IMPORTANT DATES

Last Day to Add: Feb. 7th Last day to drop: Feb. 24th Elective Withdrawal Period 2/25-3/24/06
<u>COURSE OUTLINE</u>

| Date | Class | Assignments (Due the following week) |
|--------|------------|--|
| Week 1 | • Syllabus | Read/study for quiz #1 (APA manual reading |

| | | Updated 1/30/06 |
|----------|--|---|
| | Goals of the lab | assignment: Ch. 2) |
| 1/23 | Overview of the "nuts and bolts" of research design | |
| | Description of library resources, both in the library and online | |
| Week 2 | Observational research with and without intervention | Conduct observational study. |
| 1/30 | Operational definitions Description of definitions | Staple in-class study design worksheet to your |
| 1/30 | Descriptive statistics (mainly means). Inter-rater reliability | typed collected data, along with a written |
| | APA manual reading QUIZ #1 (10pts) | summary, including a list of variables and operational definitions, and means. *Hint: |
| | Small group discussion about observational study (+ Worksheet) | Use a table for your data to make it easier. |
| Week 3 | APA format & Different sections of an APA-style paper. | Write method and results section of |
| | How to write the Method and Results sections of an APA paper | observational study. |
| 2/6 | Writing Workshop | |
| | Turn in written summary of observational study | |
| Week 4 | Correlations and correlational research | |
| 2/13 | Complete Surveys | |
| 2/13 | • Entry of survey data into SPSS | |
| | Turn in observational study Method and Results section | |
| Week 5 | Return completed method and results sections from observational study | Write method and results section for |
| 2/20 | Discussion of survey results; discuss common Method/Results mistakes | correlational study. |
| 2,20 | • Class Experiment (basis for paper #1) | Collect data from 3 people outside of class using class experiment materials |
| | Entry of memory data into SPSS | using class experiment materials |
| | Explanation of the class experiment's theoretical and empirical background | |
| Week 6 | Literature review in APA-style papers | • Print and read "class experiment/paper #1" |
| 2/27 | Workshop on writing an introduction The standard of the | foundational article. |
| 2/2/ | Turn in method and results section from correlational study Class experiment/paper #1 data to class | Obtain and read 3 more pertinent articles |
| | - Cluss experiment/paper 111 data to cluss | Write draft of intro section for paper #1 |
| Week 7 | Return completed method and results section from correlational study | Write discussion section for paper #1: BRING |
| 3/6 | • Go over results from class experiment/paper #1 data; do mid-course feedback | 2 COPIES! |
| 3/0 | Workshop on writing a discussion section | *Extra Credit: bring in draft of final version |
| | • Turn in draft of introduction for paper #1 | of paper 1 for peer review |
| 3/13 | HAPPY SPRING BREAK! | Discussion section & Extra Credit draft |
| Week 8 | Return and discuss introduction section drafts | Complete final version of Paper 1 |
| 3/20 | Peer critique of discussion & Peer Review of Drafts (Extra Credit) | |
| 3/20 | APA style abstracts | |
| | • Turn in draft of discussion for paper #1 | |
| Week 9 | Discuss ideas for final proposal | Obtain and summarize at least 5 relevant |
| 3/27 | Final Proposal topics worksheet | articles for final proposal. Next time: Turn in |
| 3/2/ | • Turn in final version of Paper #1 | reference, abstracts and summaries of each article. |
| Week 10 | Discuss outlines for final proposal, abstracts | Write outline of final proposal |
| 4/3 | Turn in article references, abstracts and summaries for final proposal | • • |
| Week 11 | Return and discuss Paper 1 | Outline of final proposal (email it to yourself |
| 4/10 | Return and discuss final proposal article abstracts | and also bring a copy to hand in). |
| 4/10 | Writing workshop | |
| Week 12 | Discussion of final proposal outlines, peer comments | Work on rough draft of final proposal (extra |
| 4/17 | Turn in outline of final proposal | credit opportunity to review draft next time) |
| *** 1.10 | | Write an abstract for final proposal |
| Week 13 | Discuss presentations Rear regions of final proposal (outro analit) | Final draft of proposal & presentation |
| 4/24 | Peer review of final proposal (extra credit) Bring 3 copies of draft of final proposal | |
| Week 14 | Student presentations of final proposal | 1 |
| E /4 | Turn in final proposal | |
| 5/1 | · · · · · · · · · · · · · · · · · · · | |

^{*}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** 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....."

The proposals must include the following:

- 1. An **Introduction** section that introduces the question/problem and includes a review of the literature 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. All of the sections should be written in appropriate APA format.
- 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 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 predicted that (insert prediction here). 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. The extra copy of the papers will be given to Dr. Linda Chrosniak for her files. We keep copies of all papers written in Psychology 301 to minimize plagiarism and to use in writing assessments for the university.