PSYCHOLOGY 301 LAB SYLLABUS RESEARCH METHODS IN PSYCHOLOGY Spring, 2006

Tuesday: 12:30pm-2:20pm, 2:30pm-4:20pm

Instructor: David Cades E-mail: <u>dcades@gmu.edu</u>

Office: David King Hall Room 2064 Office Hours: Tuesday 11am-12pm

(email is the best way to reach me)

Mailbox: labeled "Cades" and located in hallway of David King Hall Phone: (703) 993-2613

across from the Graduate Psychology Office in the graduate student 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).
- *Recommended: Thaiss, C., and Sanford, J.F. (2000). Writing for Psychology. Boston: Allyn & Bacon.
- Pen/pencil
- *Recommended: Computer disk (A:), jump/flash drive in order to save any computer work completed in lab

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. Please do not hesitate to email me, but give me at least 24 hours to respond to any question/issue/inquiry (aka 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 5pm on the Tuesday they are due. I would prefer you turn them in at the beginning of class, but if for some reason your printer doesn't work at 8am, or your dog eats it, etc, I will give you until 5:00pm to BOTH e-mail me a copy and place a hard copy in my mailbox. If a student cannot attend class and wishes to turn in a homework on-time, the assignment must be emailed to me prior to the beginning of the class on which the assignment is due. If you know in advance you'll be absent, *please* leave a hard copy in my mailbox as well. 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 you email me an assignment, you must also print it off and leave it in my mail box prior to the due date. 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 your corrected assignments; you may be required to turn in corrected drafts along with final copies of papers.

<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 in the unlikely event that you are absent and need to know what you missed.

SNOW DAYS/Campus 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 reopens (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 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 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/.

<u>Students with Disabilities:</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 critiques	
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

Last Day to Add: Feb. 7th Last day to drop: Feb. 24th Elective Withdrawal Period 2/25-3/24/06 *Note: The schedule on the following page is tentative, and topics and assignments are subject to change. Any changes will be announced in class.

<u>Underlined</u>= items to be returned in class

Bold= in-class activities

Italics= assignments to be turned in at the beginning of the period.

Date	Class	Assignments (Due the following week)
Week 1	Syllabus	Read Ch. 2 in APA manual
1 /0 4	Goals of the lab	
1/24	Overview of the "nuts and bolts" of research design	
W1 2	Description of library resources, both in the library and online	
Week 2	Observational research with and without intervention	Conduct observational study.
1/31	 Operational definitions Descriptive statistics (mainly means). 	Staple in-class study design worksheet to your
1/01	Inter-rater reliability	typed collected data, along with a written summary, including a list of variables and
	• QUIZ (10pts) on Chapter 2 of APA manual	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.
2/7	Writing Workshop	-
	Turn in written summary of observational study	
Week 4	Correlations and correlational research	
2/14	Complete Surveys	
2/14	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
	Discussion of survey results; discuss common Method/Results mistakes	correlational study.
2/21	• Class Experiment (basis for paper #1)	Collect data from 3 people outside of class
	• Entry of memory data into SPSS	using class experiment materials
	Explanation of the class experiment's theoretical and empirical background	
Week 6	Explanation of the class experiment's theoretical and empirical background Literature review in APA-style papers	Print and read "class experiment/paper #1"
Week o	Workshop on writing an introduction	foundational article.
2/28	Turn in method and results section from correlational study	Obtain and read 3 more pertinent articles
	Class experiment/paper #1 data to class	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
3/7	Go over results from class experiment/paper #1 data; do mid-course feedback	2 COPIES!
3/ /	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
Week 8: 3/14	HAPPY SPRING BREAK!	Discussion section & Extra Credit draft
Week 9	Return and discuss introduction section drafts	Complete final version of Paper 1
2/21	Peer critique of discussion & Peer Review of Drafts (Extra Credit)	
3/21	APA style abstracts	
	Turn in draft of discussion for paper #1 Turn in draft of discussion for paper #1	
Week 10	Discuss ideas for final proposal	Obtain and summarize at least 5 relevant
	Final Proposal topics worksheet	articles for final proposal. Next time: Turn in
3/28		reference, abstracts and summaries of each article.
Week 11	Turn in final version of Paper #1 Diversion of Conference Industrial Turn in final version of Paper #1	Write an abstract for final proposal
4/4	Discuss outlines for final proposal, abstracts	write an abstract for final proposal
	Turn in article references, abstracts and summaries for final proposal	
Week 12	Return and discuss Paper 1	Outline of final proposal (email it to yourself
4/11	Return and discuss final proposal abstracts	and also bring a copy to hand in).
	Writing workshop	
Week 13	Discussion of final proposal outlines, peer comments	Work on rough draft of final proposal (extra
4/18	Turn in outline of final proposal	credit opportunity to review draft next time)
Week 14	• Discuss presentations	Final draft of proposal & presentation
4/25	Peer review of final proposal (extra credit) Prince 2 coming of dueft of final proposal Prince 2 coming	
Week 15	Bring 3 copies of draft of final proposal	
WCCK 13	Student presentations of final proposal	
5/2	Turn in final proposal	

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 introducers 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. 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.