

Psychology 211C: Experimental Methods and Data Analysis I
Fall 2006

Instructor: Dr. Sarah Johnson	When: T/R 9:10-11:10am
Phone: 625-7013	Where: 113 PPHAC
Office: 224 PPHAC	Website: http://blackboard.moravian.edu/
Office Hours: M 10-11am; T 1-3pm, F 9-11am	Email: skjohnson@moravian.edu

Overall Course Goal: This course will foster understanding of how researchers in psychology go about studying the way individuals think, feel, act, etc. The primary focus of this first course in the 2-part series of 211-212 is on the methodology and paradigms used to explore psychology and on some of the basic statistical procedures used. Further understanding of more advanced statistical procedures will be the focus of Psyc 212, in which you will actually implement a study of your own design. The proposal of the design for your own study will be the major project of the current class.

Specific Course Objectives: By the end of this course, you should be able to:

1. Discuss how researchers investigate psychological processes, including knowing the important criteria of good scientific research and understanding what ethical issues are most relevant to psychological research and how such issues are handled.
2. Understand a study that is described using psychological methodology terms, and use such terms appropriately yourself to discuss research designs.
3. Evaluate a study in terms of the potential flaws in its design and suggest appropriate improvements where necessary.
4. Use basic statistical procedures appropriately in conjunction with specific designs in order to understand a set of data, apply such statistical procedures using SPSS (Statistical Package for the Social Sciences), and graph the data using either SPSS or Excel.
5. Research a topic in an area of psychology using various electronic databases, such as PsycInfo, and organize your findings into an appropriately formatted reference list.
6. Plan a study, using a design that minimizes flaws and maximizes your ability to obtain data that accurately address your research question.
7. Write a research proposal following the guidelines set forth by the American Psychological Association Publication Manual.

My expectations of you:

1. Arrive on time for every class session and be prepared to be engaged and to participate. If I ask for comments, participation, or feedback during class, I expect active responses.
2. Take good notes where necessary and ask questions when you need clarification. When appropriate, I will provide lecture notes via Blackboard (*password = methlab*). To the best of my ability I will post these in advance of lectures. If not, the notes will be up on Blackboard later that day. These handouts will give you an outline of what we will be covering but you will need to fill in additional info or expand on the outline during class.

I am not responsible for giving you this info in the event that you miss class. If you miss class, you should arrange to get the notes from a classmate who was in class that day.

3. Read all assigned readings carefully and thoroughly in advance of class. Come and see me if you do not understand part or all of the reading.
4. Read instructions for assignments carefully and if you do not understand any part of the instructions come see me well before the assignment is due.
5. Turn in assignments on time! Assignments should be checked thoroughly and edited for clarity, conciseness, spelling and grammar before they are turned in to me.
6. All work (homework assignments, exams, papers, etc.) should be your own!

What you should expect from me:

1. I will arrive on time, or if possible early, for every class session and will be prepared to be engaged and to participate.
2. I will be available in my office during office hours, and can be reached outside of office hours via email for questions and concerns. I am on email frequently and can usually answer simple questions very quickly. I will typically wait for you to tell me that you need help, but I will be more than happy to meet with you when you do.
3. I will return your writing with carefully thought-out feedback, with an eye toward helping you refine that particular assignment and your writing skills in general. As you are being asked to turn in multiple drafts of the main paper, it is expected that you will refine the writing in that paper as the course progresses. However, it is also possible to use comments on a paper or assignment to refine your writing in general, and I expect that to be one of your aims throughout the course. I am always happy to go over my comments on any drafts or final reports with you.
4. I will announce ahead of time any changes from the syllabus to readings, assignments, or projects. I may occasionally make minor changes in topic without announcement.

Required Textbooks: Any additional readings will either be handed out during class or made available via Blackboard. Readings may be added that are not currently on the class schedule.

American Psychological Association (2001). *Publication Manual of the American Psychological Association* (5th ed.). Washington, DC: APA.

Heiman, G. W. (2001). *Understanding Research Methods and Statistics* (2nd ed.). New York: Houghton Mifflin Company.

Calculator: You will need a calculator for many class meetings, so please bring it every class. You should have a calculator that includes a square root button, but it does not need any built-in calculations more advanced than that. You can purchase such a calculator for as little as \$5. Calculators that allow you to save new equations or that automatically calculate any of the statistical tests we will be learning are not permitted. If you aren't sure whether your calculator is appropriate, you can bring it to me for approval. **If a prohibited calculator is used for an exam, the exam will receive a grade of zero.**

Course Evaluation:

Class Participation: Your attendance is required at every scheduled class meeting. This requirement is necessary for two reasons: 1) The coursework is extremely layered and missing one day can put you behind not just on that day's information and assignments but also for future meetings and assignments; 2) Your fellow students rely on your presence, for providing feedback or participating in group activities. Each student can have up to 2 excused absences. Such absences must be documented and must be discussed with me before the absence, if at all possible, or else as soon after the absence as is physically possible. For each unexcused absence or absence beyond your 2 excused absences, your final course grade will be reduced by 1/3rd letter (e.g., B+ → B). If you have special circumstances that will result in missing more than one or two classes, you should contact the Learning Services Office. In addition, I reserve the right to *adjust* final grades based on the quality of participation, as follows:

- + A student who arrives on time and prepared for *every* class, participates in discussion frequently, but without overly dominating, is highly active in all group activities, and who generally contributes high quality ideas during class, may receive a boost of 1/3rd letter grade to his/her final course grade.
- No adj. A student who arrives on time and prepared for most classes, answers questions in class sufficiently and occasionally adds his/her own comments or questions, and participates sufficiently in group activities but does not seem especially engaged or show evidence of frequent high-quality contributions, will not receive any adjustment to his/her final course grade. I expect the majority of the class to fall in this category.
- A student who shows up late to class several times, prepares to some extent but adds little to class discussions or group activities, contributes to discussions/activities but shows evidence of poor preparation, or who repeatedly fails to follow instructions for an in-class activity may receive a reduction of 1/3rd letter grade to his/her final course grade.

For any case in which a reduction of course grade may be warranted, a warning note will be given to the student privately before the end of the semester in order to allow him/her the chance to modify the behavior and avoid the reduction. Grade boosts may be given without “warning.”

Assignments: There will be some in-class and some take-home assignments due over the course of the semester. Take-home assignments should be typed—excluding computational problems, which may be written by hand—and proofread for clarity, spelling and grammar, etc, as appropriate. Unless otherwise noted, take-home assignments are due at the beginning of class, and in-class assignments are due before leaving class. Late assignments will ***not be accepted*** (**NO** exceptions). If you miss an in-class assignment due to unexcused absence, you will not be permitted to make it up. If you miss an in-class assignment due to an excused absence, we will, if possible, arrange an extension in proportion with the excuse, as determined on a case-by-case basis. However, there are some in-class activities/assignments that cannot be made up if missed.

Exams: There will be three exams given throughout the semester and one cumulative exam given during finals period. Exam format may include multiple choice, short answer/identification, short essay, and/or computational problems. Exams can include questions on anything in the assigned text chapters and handouts even if not discussed in lecture. Study guides will be posted on Blackboard as each exam approaches. The study guides will include important terms to know for the exam as well as sample exam questions. You will be allowed to use the grade on the cumulative final to replace a lower score from the earlier exams or to

substitute for a missed exam provided you had an *extraordinary* and *documentable* excuse for missing the exam, as determined on a case-by-case basis. If you use the final exam to substitute for another exam, the final itself will then count twice in determining your final course grade.

Missed exams: If you have an extraordinary and documentable excuse for missing an exam, contact me as soon as possible and we will arrange to either administer a make-up exam or to have you skip that exam and use the cumulative final to substitute for it. If you know in advance that you will be absent during an exam (e.g., because of travel for a sports team or an interview) then you need to let me know as soon as possible before the exam. You may not use the cumulative final to replace a missed exam if you skipped the exam without legitimate reason for absence.

Proposal: You be working throughout the semester on a proposal for a study to be implemented next semester (in Psyc 212). This project has multiple components that will build on each other, culminating in a final research proposal, with at least 8 references, written in APA style. Some portions of the project will be ungraded (e.g., “Topics of interest” list, methods draft); these ungraded portions must be turned in on time or a reduction will be applied to the graded portion of the proposal. Further information regarding the expectations for and grading of homework assignments, and proposal components will be given in separate handouts.

Note that it is within my purview to use qualitative judgment in assigning grades for various components of the course (e.g., participation, homework assignments, exam essays, papers, etc.). If you have a question regarding any aspect of your grade, you should come see me to discuss it.

Overall grades- Breakdown:

Homework/In-class assignments (total)	20%
Exams (3 @ 10% each)	30%
Final exam	15%
Proposed Research Outline	5%
Proposal draft	15%
<u>Final proposal</u>	<u>15%</u>
Total 100%	

Unless otherwise noted, I will use the following scale for calculating grades:

Letter	Score	Grade range
A	100	95-100
A-	92	90-94
B+	88	87-89
B	85	83-86
B-	81	80-82
C+	78	77-79
C	75	73-76
C-	71	70-72
D+	68	67-69
D	65	63-66
D-	61	60-62
F	0	0-59

Late Policy: Late homework assignments and ungraded portions of the proposal will not be accepted (NO exceptions). Late papers will be accepted for up to three days after the due date and, unless otherwise noted, will result in a reduction of *1 letter grade for every calendar day late* beginning at 5pm on the day the assignment is due. After the three-day period, an assignment will not be accepted and a grade of 0 will be applied. NO exceptions will be made to this rule, including situations involving legitimate and documentable excuses and technical difficulties. In addition, I will only accept work turned in by email if you have arranged with me to do so for that particular assignment.

Plagiarism and cheating:

Any work that you turn in for this class must be entirely your own work. Any sources used must be properly documented, and I will ask you not to use any direct quotes in assignments or papers. For more information on plagiarism and cheating, refer to the Student Handbook and the following website regarding academic responsibility at Moravian College: <http://www.moravian.edu/studentLife/handbook/academic2.htm>. As this site clearly explains, the consequences for cheating or plagiarism can range from failing the assignment to receiving an F for the final course grade to expulsion, depending on the severity of the case and prior history of offenses. Although I am not generally opposed to your discussing assignments with fellow students from the class, all of the work you submit to me must be entirely your own, and in some cases I may ask you not to collaborate with fellow students.

I will spend class time discussing ways to avoid plagiarizing, but apart from this it is your responsibility to come see me if you have any questions about your use of sources or when/in what way it is okay to collaborate with other students in the class.

Disabilities: The Americans with Disabilities Act (ADA) provides for some accommodations to be made for students with certain disabilities. If you have such a disability and are willing to disclose it, you may take advantage of such accommodations. In order to do so, you are required to meet with Mrs. Laurie Roth in the Office of Learning Services (for learning disabilities and/or ADD/ADHD) or Dr. Ronald Kline in the Counseling Center (for all other disabilities). Accommodations cannot be offered until I have received authorization from one of these centers based on documentation of your disability. You should also consider taking advantage of the Learning Services Office if you are having difficulty academically in this (or any other) class. The office is located at 1307 Main St. (phone: 610-861-1510).

PLEASE NOTE: THERE IS A POLICY IN THE PSYCHOLOGY DEPARTMENT STATING THAT, IN ORDER TO MOVE ON TO THE SECOND COURSE IN THIS SERIES (PSYC 212), YOU MUST EARN AT LEAST A C IN THIS COURSE. BOTH 211 AND 212 ARE REQUIRED FOR PSYCHOLOGY MAJORS.

I am always happy to meet with students, but ultimately it is your responsibility to come and see me if you have any questions or concerns about class in general or about your performance in this class. Don't let things snowball; if you are having trouble, come and see me as soon as possible! The longer you wait, the less I can help you!

Class Schedule (This schedule is tentative. I reserve the right to make announced changes, including adding readings with sufficient notice.):

Week:	Class topic/activities:	Text Chs/Assignments:
1	Aug 29 T Introduction and course overview	
	Aug 31 R Scientific Methods	Ch. 1
2	Sept 5 T Design & Interpretation	Ch. 2
	Sept 7 R Reliability & Validity	Ch. 3
3	Sept 12 T Design issues & Ethics (experiments)	Ch. 4; Topics of interest in Ψ due
	Sept 14 R Cont'd	<i>Design issues assignment</i>
4	Sept 19 T <i>Library workshop</i>	
	Sept 21 R Design issues & Ethics (descriptive)	Ch. 5; Literature research plan due
5	Sept 26 T Cont'd	
	Sept 28 R In-class design critique lab	[assigned articles, TBA]; <i>Design critique assignment (in-class)</i>
6	Oct 3 T Catch-up/review day; APA lab	<i>APA lab assignment (in-class)</i>
	Oct 5 R Exam 1	
7	Oct 10 T No class [Fall break]	
	Oct 12 R Frequency distributions & Percentiles; Central tendency	Chs. 6-7; Proposed Research Outline due
8	Oct 17 T Central tendency cont'd	<i>Central tendency assignment</i>
	Oct 19 R Variability	Ch. 8
9	Oct 24 T <i>In-class proposal design critiques</i>	
	Oct 26 R Variability cont'd	<i>Variability assignment</i>
10	Oct 31 T Catch-up/review day; <i>In-class peer review of methods</i>	Proposal methods draft due in-class
	Nov 2 R Exam 2	
11	Nov 7 T z-scores	Ch. 9; Proposal draft w/commentary due
	Nov 9 R Correlation	Ch. 10; <i>z-score assignment</i>

Week:	Class topic/activities:	Text Chs/Assignments:
12		
Nov 14 T	Cont'd	<i>Correlation assignment</i>
Nov 16 R	Regression	Ch. 11
13		
Nov 21 T	Regression cont'd	<i>Regression assignment</i>
Nov 23 R	No class [Thanksgiving break]	
14		
Nov 28 T	Catch-up/review day	
Nov 29 R	Exam 3	
15		
Dec 5 T	Probability	Ch. 12; Proposal final draft due
Dec 7 R	Probability cont'd/Final exam review	<i>Probability assignment</i>
Finals Wk	Final exam schedule TBA	

Exam 1: Chs. 1-5

Exam 2: Chs. 6-8

Exam 3: Chs. 9-11

Final exam: Cumulative + Ch. 12