PSYC 211 Experimental Methods & Data Analysis I Spring 2013

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Course Overview:

This first course in a two-course sequence is designed to introduce you to the scientific method as the means through which knowledge advances in psychology. In it you will learn how to develop and test hypotheses, collect reliable data, use some basic statistical techniques, and to interpret and report the results of statistical tests. You will also begin to learn the skills and tools used by psychologists in their work, including descriptive and inferential statistics, spreadsheets and graphing, the Statistical Package for the Social Sciences (SPSS), and writing in American Psychological Association (APA) format. All students will complete a research proposal for a research project they will conduct during the second course in the sequence. This course is a writing and computing intensive course for the major in Psychology. Prerequisite: PSYC 120.

Course Objectives:

Students who successfully complete this course, should be able to:

- 1. Appreciate the strengths and weaknesses of scientific method as a way of knowing
- 2. Understand and apply the APA Principles of Ethical Conduct to the research process
- 3. Think critically about all phases of the research process in order to critique their own research and the research of others, as well as to become better consumers of information
- 4. Use appropriate on-line and library resources in the research process
- 5. Design a study to answer a question of interest to them
- 6. Understand the connection between research design and statistical analysis
- 7. Use SPSS (Statistical Package for the Social Sciences) to summarize and analyze data
- 8. Write a research proposal in APA format

Required texts:

[Note: You will use these same texts in Fall 2013 for the second part of the PSYC 211/212 course sequence. You *must* rent or purchase both texts as they will be used for open-book portions of exams and in classroom activities.]

Jackson, S. L. (2012) *Research methods and statistics: a critical thinking approach*. (4th ed.) Belmont, CA: Wadsworth. [In class schedule as: **Jackson**]

Course Requirements and Grading:

Quizzes	10%
Attendance & Class Participation	10%
Homework Assignments	15%
In-Class Exams (2) (15% each)	30%
Final Exam	15%
Proposal & Proposal Writing Process	20%

[Extra Credit]

Explanation of Course Requirements and Grading

Quizzes

A 12-item open book quiz (with a 12-minute time limit) will be given and then discussed in class as we begin each chapter. Although the quizzes are open book, preparation is necessary: you will not have time to read the text for the first time as you take it! There will be no opportunity to make up quizzes. However, you will only need to earn 80 out of a possible 96 points to get 100% for your overall 'Quizzes' grade. Any points earned over 80 points will be applied as extra credit to test grades.

Attendance & Class Participation

Please plan to attend all classes, and to come prepared to participate in the day's activities and discussions. (Warning: It is very easy to fall behind in this course!) You will be asked to sign in at the beginning of each class meeting. If you must miss a class, please arrange to submit any assignments that are due that day. (Do not wait until the next class meeting-see policy on late assignments, below). You will also need to arrange to get notes and handouts-I can help with this if you let me know in advance of an absence. The attendance grade will begin at 100% and be reduced by 4 points for an unexcused absence or 2 points with a valid excuse such as a doctor's note, a note from another professor or from Student Services). If special circumstances arise that will cause you to miss more

Dunn, D. S. (2011) *A short guide to writing about psychology* (3rd ed.) Boston, MA: Longman. [In class schedule as: **Dunn**]

than one class, you should contact the Learning Services Office.

Homework Assignments

Due dates for all major assignments appear in the class schedule. Regular homework assignments will depend upon what we have covered in class that day so they will be announced on a day-by-day basis. Late assignments will be accepted up to 2 days late, at a penalty of 2 points per day. Answers to critical thinking exercises can be found at the end of each chapter in the Jackson text, and answers to all odd-numbered homework problems can be found in the back of the book. You should get in the habit of testing yourself by completing these problems even though I do not assign them. There is no way to know if you understand the material well enough to test well unless you do the problems.

In-Class Exams & Final Exam

There will be two **in-class** exams over the course of the semester, as noted in the class schedule below. Since this course is a prerequisite for PSYC 212 (which you will all take in the Fall), there will be a cumulative final exam during the final exam period. In-class exams may have both open and closed book portions, and may consist of question formats such as multiple choice, short answer, short essay and computational problems. The exact format of a particular test will be announced in advance of the test date. The **cumulative final** will serve as a makeup for any exam missed during the semester. In that case, the cumulative final grade will count twice: once as the cumulative final (15% of course grade) and once as the missed exam grade.

Proposal & Proposal Writing Process

There will be a series of assignments leading up to the point at which you submit the final draft of your proposal for an empirical study that you will conduct next semester in PSYC 212. Grades on these assignments will contribute to your homework grade. In addition, to help everyone stay on track, I will ask you for periodic updates on your work in preparing to write your proposal. These updates will be unannounced, and will take the form of asking you to write a short paragraph in which you summarize what you have recently accomplished. These updates will be done in class, and can include things you have thought about or read, searches you may have done, discussions or meetings you have had and so on. It is therefore a good idea for you to keep a journal which you can reference in writing the updates. I will keep copies of these updates and use them to assist me in establishing a proposal writing process grade for you.

Extra Credit

Students may earn up to 4 points extra credit by participating in research projects through the department's subject pool. One point may be earned for each ½ hour of participation.

Calculating your Grade:

A grade of C (72.6) or better in this course is required in order to declare a psychology major (yes, we do check).

To calculate your final grade, I first add any extra credit points earned and then weight each grade according to the percentages given above. For example, if an exam is worth 15% and you score an 80 on it, I multiply (.15) (80) for a point total of 12. Adding these points together for all the grading components listed above will give you your final grade for the course (out of 100 points). These points are then converted to a letter grade as follows:

92.6-100	=	А
89.6 - 92.5	=	A-
86.6–89.5	=	$\mathbf{B}+$
82.6 - 86.5	=	В
79.6 - 82.5	=	B-
76.6 – 79.5	=	C+
72.6 – 76.5	=	С
69.6 – 72.5	=	C-
66.6 – 69.5	=	D+
62.6 - 66.5	=	D
59.6 - 62.5	=	D-
less than 59.6	=	F

Students Please Note: It is within the instructor's purview to apply qualitative judgment in determining grades in the course.

Expectations for the Course

Preparation and Commitment

Since this is a rigorous course that serves as a prerequisite for upper level courses in psychology, you must be willing to give preparation for it a high priority. Your studying will not be successful if done in 10 or 15 minute segments, late at night or at the last minute. We recommend *at least* five study sessions per week of *at least* one hour in length, although what is needed may vary from individual to individual.

All of you have had a basic writing course (WRIT 100 or equivalent). Therefore, I expect strong writing to be displayed in your assignments and projects. Spelling, grammar, and structure are always relevant, and will therefore be an important factor in my grading of your work. *Use the Writing Center* to develop added confidence in your writing skills! Please note that the Writing Center is located in a building that is not accessible to persons with mobility impairments. If you need the services of the Writing Center, please call 610-861-1392.

In the spirit of fairness to ALL students I must be consistent with the policies laid out in this syllabus and ask you to be familiar with and respectful of them.

Academic Integrity

Academic integrity is a core value of the college and is expected. Cheating and plagiarism will not be tolerated. It is my contractual agreement with the college to report all *suspected* cases of plagiarism and cheating. Plagiarism is the misrepresentation of someone else's work as your own. This includes, but is not limited to, transcribing sentences or paragraphs belonging to another author directly from another written source giving the impression that they are your own words, quoting directly from a published work without giving the author credit (i.e. proper citation), using or "borrowing" another student's work, or buying a paper from a professional service. Students must keep all notes and rough drafts until given a grade for the course. See your Student Handbook for a more complete description. Please see me for any needed clarification.

Office Hours: Mondays & Wednesdays 1-2:30pm; Thursdays 2:30-3:30 Or by appointment (email: meljt01@moravian.edu) (Telephone 610-861-1565)

e-mail is the preferred means of contacting me. Phone messages will be returned via e-mail, except for special circumstances. If you are using an e-mail address other than your college address, please change this contact information on Blackboard.

Learning Services

Students who wish to request accommodations in this class for a disability should contact Elaine Mara, the Assistant Director of Academic and Disability Support in the Academic Support Center, Monocacy Hall, lower level (ext. 1510). Accommodations cannot be provided until authorization is received from the Academic Support Center. Accommodations must be authorized on a class by class basis every term. [This is required by the ADA and is not done to annoy you!]

I will be working with Learning Services to arrange **tutoring services** for this class. Please see me if you believe you are in need of such assistance.

Students Please Note: The class schedule that follows is subject to change at my discretion in order to make the class flow more smoothly. Except for extreme circumstances, I will not change the due dates for major assignments.

Class Schedule

<u>Date</u>	<u>Topic</u>	Readings & Major <u>Assignments</u>	
(1) Mon 1/14	Introduction to the Course	None	
(2) Wed 1/16	Ways of Knowing	Jackson, Ch 1	
No classes held: MLK Day			
(3) Wed 1/23	The Research Process	Quiz, Jackson Ch 1 DUE: Long Topic List	
(4) Mon 1/28	Information Literacy	Dunn, Ch 2 Jackson, Ch 2	
(5) Wed 1/30	Research Ethics	Quiz, Jackson Ch 2	
(6) Mon 2/4	Writing Workshop I	DUE: Best 3 Topics Dunn, Ch 1	
(7) Wed 2/6	Measuring Variables I	Jackson, Ch 3 <i>Quiz, Jackson Ch 3</i> DUE: Structured Critique #1 Outline	
(8) Mon 2/11	Measuring Variables II	Dunn, Ch 3	
(9) Wed 2/13	Measuring Variables III	DUE: Annotated Bibliogaphy	
(10) Mon 2/18	Catch up/Exam Review	DUE: Structured Critique #1 Narrative	
(11) Wed 2/20	Exam #1	Prepare for Exam	
(12) Mon 2/25	Research Design II	Jackson, Ch 9	
(13) Wed 2/27	Research Design II	DUE: Research Proposal Outline	
Spring BreakEnjoy!			
(14) Mon 3/11	Research Design III	Quiz, Jackson Ch 9	

<u>Date</u>	<u>Topic</u>	Readings & Major <u>Assignments</u>
(15) Wed 3/13	Observational Methods	Jackson, Ch 4 DUE: Structured Critique #2 Narrative
(16) Mon 3/18	Survey Construction	Quiz, Jackson Ch 4
(17) Wed 3/20	Frequency Distributions	Dunn, Ch 4 & 5 Deadline for proposal outline revisions
(18) Mon 3/25	Graphing & Measures of Central Tendencey	Jackson, Ch 5, pp. 104-113 <i>Quiz, Jackson Ch 5,</i> <i>Part 1</i>
(19) Wed 3/27	Central Tendency (cont.) & Exam Review	Deadline for revisions for article critiques
East	er BreakEnjoy!	
(20) Wed 4/3	Individual Proposal Meetings (10:20-12:20)	DUE: 1 st Draft of Proposal
(21) Mon 4/8	Exam #2	Prepare for Exam
(22) Wed 4/10	Variability & Skew	Jackson, Ch 5, pp. 114-133
(23) Mon 4/15	z scores	DUE:Proposal Draft 2 Quiz, Jackson Ch 5, Part 2
(24) Wed 4/17	z scores	Jackson, Ch 6
(25) Mon 4/22	Correlation	Quiz, Jackson Ch 6
(26) Wed 4/24	Correlation	DUE: Final Proposal (Draft 3)

Final Exam: Tuesday, April 30th at 8:30am