

Psychology 211
Experimental Methods & Data Analysis I
FALL 2013

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Office Hours: Monday 2:00 – 3:00
Tuesday and Thursday 11:45 – 1:00
Wednesday and Friday by appointment only

Please stop in during my office hours if you have a question, concern, or if I can help out in anyway. If none of these times are convenient for you, other times may be arranged. Please feel free to call me to set up an appointment.

Class Time: **Tuesday & Thursday 1:10 – 3:25**
Class Room: **113 PPHAC**

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: PS 120.

Important Course Information: The Department of Psychology implemented a policy which states that students enrolled in Psych 211 **must earn a grade of C or higher** in order to declare themselves a Major in Psychology and enroll in the companion course, Psych 212 (Experimental Methods and Data Analysis II). There are no exceptions to this policy. Both Psych 211 and 212 are required in order for a student to major in psychology at Moravian College. PS 211 alone serves as a prerequisite to most of our upper level classes.

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 the student's interest
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 the course texts in the Fall 2013 semester as you will in the Spring 2014 semester. You *must* purchase all three textbooks as they will be used for open-book portions of exams and in classroom activities. You should bring both texts to class every day.

Please also be sure to bring a calculator with a square root function to class each day as well. **You may not use your cell phone as a calculator.**]

Dunn, D. S. (2013). *The Practical Researcher: A Student Guide to Conducting Psychological Research* (3rd ed.). Hoboken, NJ: Wiley.

Dunn, D. S. (2011). *A Short Guide to Writing about Psychology* (3rd ed.). New York, NY: Pearson Longman.

Nolan, S. A., & Heinzen, T. E. (2014). *Essentials of Statistics for the Behavioral Sciences* (3rd ed.). New York, NY: Worth.

Course Requirements and Grading:

In Class and Final Exams

There will be three exams over the course of the semester, as noted in the class schedule below. The exams will consist of both open and closed book portions, and may contain 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 first two exams will be administered in class and the final exam will be administered during the final exam period. The final exam will be a cumulative exam and will also cover chapters. Makeup exams will not be administered. If you miss an exam your final exam will count twice – once for the final exam and second for the missed exam grade, provided you had extraordinary and documented excuse for missing the exam, as determined on a case by case basis.

Attendance and Class Participation

You are expected to attend all classes. Success in this class requires constant attendance. Participation, too, matters. I expect that you will attend each and every class, arrive on time, and that you will come prepared to discuss and to ask questions about the course material.

Excessive absences will be dealt with on an individual basis. If special circumstances arise that will cause you to miss more than one or two classes, you should contact the Learning Services Office. Participation, too, matters. I expect that you will come to class prepared to discuss and to ask questions about the course material.

HW & Out of Class Assignments

There will be in-class and some take-home assignments due over course of the term. All take-home assignments—except for calculations—should be typed, proofread for clarity and grammar, spell-checked, etc. Unless otherwise noted, all take-home assignments will be due at the start of class. Late assignments will not be accepted (there are no exceptions to this rule—please don't ask). If you miss an in-class assignment due to an unexcused absence, you cannot make it up. Excused absences will be considered on a case-by-case basis.

Assignments will be announced in class on a day-by-day basis. Assignments will include both in-class and out-of-class SPSS laboratories, short reaction papers, and problems assigned from any of your texts.

The APA Research Proposal

Across the semester, you will be working on a research proposal—a design for an experiment or other empirical investigation—for a project that you will conduct from start to finish next semester (fall 2015). The proposal has several parts, each building

upon the other. Your research proposal, which is due at the conclusion of this semester must be written in APA-style. We will discuss APA style in class and it is highlighted in your texts. Portions of your proposal will be submitted in advance and will be ungraded (you will, however, receive comments and feedback); other parts will be graded. If you fail to submit a given part of the proposal when it is due, your final grade will be affected. We will also share rough drafts of proposal materials with other students in class for peer feedback.

Grading Rubric:

Exams: **45%**

APA Paper:

Topics and APA references	5%
Research Proposal Draft	5%
Presentation	5%
THE Research Proposal	20%

Other:

HW & Lab Assignments	10%
Attendance & Class Participation	10%

Note: Failure to turn in any of the above assignments on time will result in a half a letter grade deduction.

Extra Credit:

Students may earn up to 3 points extra credit applied to your final exam grade by participating in research projects through the department's subject pool. One point may be earned for each ½ hour of participation.

Grading Standards:

Grades will be assigned using the standards listed in the Student Handbook:

A = “achievement of the highest caliber” reflecting “independent work, original thinking, and the ability to acquire and effectively use knowledge.”

B = “higher than average achievement” which evidences “independent work and original thinking.”

C = average work for which “the student has devoted a reasonable amount of time, effort, and attention to the work of the course and has satisfies the following criteria: familiarity with the content of the course, familiarity with the methods of study of the course, and active participation in the work of the class.”

D = “unsatisfactory work, below the standard expected by the College” which indicates “work which in one or more important aspects falls below the average expected of students for graduation. The work is, however, sufficient to be credited for graduation.”

F = failure.

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	=	A
89.6 – 92.5	=	A-
86.6– 89.5	=	B+
82.6 – 86.5	=	B
79.6 – 82.5	=	B-
76.6 – 79.5	=	C+
72.6 – 76.5	=	C
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.

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. Please visit: <http://www.moravian.edu/studentlife/handbook/academic/academic2.html> to view the policy.

Learning Services

"Students who wish to request accommodations in this class for a disability should contact Ms. Elaine Mara, Assistant Director of Academic & Disability Support, located on the first floor of Monocacy Hall (extension 1401). Accommodations cannot be provided until authorization is received from the Academic & Disability Support office."

A Request Regarding General Classroom Etiquette:

Now that we are in the age of cell phones, pagers, and laptops, I have found that the use of these pieces of technology can be both positive and negative. They certainly make life easier, but they are not necessarily helpful in the classroom. I would ask that all cell phones and pagers be turned off or placed in a silent mode prior to the start of class.

Having cell phones and pagers go off during class is disruptive both to me and my train of thought (which can be easily derailed at times!) as well as to your fellow students. If there is an emergency situation where you need to be reachable during class, place your cell phones or pagers in vibrate mode. If they go off, please leave the class to take the call. Please only respond to cell phones or pagers if there is a true emergency. If you use laptops for note-taking, this is fine as long as that is truly what you are doing with your laptop. Please do not check email, check facebook, write letters, or surf the web—just so you know, it is quite easy to tell when students are using laptops for purposes other than note-taking.

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 (e.g. multiple class cancellations due to severe weather) I will not change the due dates for major assignments.

D = Dunn *The Practical Researcher*
DW = Dunn *Short Guide to Writing About Psychology*
NH = Nolan & Heinzen *Statistics*

Class Schedule

Week 1	Topic	Assigned Reading
1/20	Organizational Meeting – What to expect from PS 211?	
1/22	The Value of the Scientific Method	D Ch. 1
Week 2		
1/27	The Scientific Method continued	
1/29	Writing in Psychology	DW Ch. 1
Week 3		
2/3	Reading Psychological Literature in Psychology	D Ch. 2 & 3 DW Ch. 2
	*bring a list of 3 possible topics	
2/5	Library Research Workshop EPA – I will be out of town at a conference	
Week 4		
2/10	Introduction: Statistics & Research Design Refining Research Topics	NH Ch. 1
2/12	Ethics in Psychological Research	D Ch. 5
Week 5		

2/17	EXAM 1	
2/19	Reading & Critiquing APA Articles	DW Ch. 3 & 4 D Ch. 4
	*bring three APA references on your topic to class	
Week 6		
2/24	Creating solid questions for your experiments.....	
2/26	Frequency Distributions	NH Ch. 2
Week 7		
3/3	Frequency Distributions	NH Ch. 2
3/5	Visual Displays of Data	NH Ch. 3
Week 8		
3/10 & 3/12	Spring Recess – Enjoy and Be Safe!	
Week 9		
3/17	Central Tendency	NH Ch. 4
3/19	Variability	NH Ch. 4
Week 10		
3/24	Writing Workshop – Research Proposal *bring a draft of your introduction to class	DW Ch. 5, 7
3/26	Catch up Day -	
Week 11		
3/31	EXAM 2	

4/2 Sampling and Probability NH Ch. 5

Week 12

4/7 DRAFT Proposal Writing Workshop DW Ch. 5 & 7
 *bring a rough draft of your Method to class
Submit introduction

4/9 Experimental Research D Ch. 6
Submit Method

Week 13

4/14 Experimental Research con't ---

4/16 Work on your Research Proposals
 NCUR – Out of town at a conference

Week 14

4/21 z-Scores NH Ch. 6

4/23 *z- Scores Continued* NH Ch. 6
Final Proposal Draft Due (4/23)

Week 15

4/28 *Research Proposal Presentations*

4/30 *Last Day of Class*

Looking Ahead to PS 212 and
Course Evaluations

Finals Week

Exam III – Cumulative Final.