

# **Psychology 211B**

## **Experimental Methods & Data Analysis I**

### **Spring 2012**

**Instructor:** Dr. Lori Toedter  
**Office:** PPHAC Room 227

**e-mail:** [meljt01@moravian.edu](mailto:meljt01@moravian.edu)  
**Office Phone:** 610-861-1565

---

#### **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 2012 for the second part of the PSYC 211/212 course sequence. You *must* purchase both texts as they will be used for open-book portions of exams and in classroom activities.]

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

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

### **Course Requirements and Grading:**

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

[Extra Credit]

### **Explanation of Course Requirements and Grading**

#### **Quizzes**

A 12-item open book quiz will be given and then discussed in class as we begin each chapter. A **twelve minute** time limit will be *strictly* enforced. Although the quizzes are open book, preparation is necessary: *you will not have time to read the text as you take it!* There will be no opportunity to make up quizzes. There will be 8 quizzes given over the course of the semester. Any points earned over 80 points (out of the 96 points possible) will be applied as extra credit to test grades.

#### **Attendance & Class Participation**

You are expected to attend all classes, and to be prepared to participate in the day's activities and discussions. You will be asked to sign in at the beginning of each class. If you must miss a class, it is still your responsibility to submit any assignments that are due that day *on that day*. (See policy on late assignments, below). You will also need to arrange to get notes and handouts. The attendance grade will be reduced by 4 points for an unexcused absence, 2 points with a valid excuse (doctor's note, note from other professor or from Student Services). If special circumstances arise that will cause you to miss more than one class, you should contact the Learning Services Office.

### Homework Assignments

Due dates for all major assignments appear in the class schedule. Homework assignments will be announced on a day-by-day basis and then posted on Blackboard. 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 Spring), 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 which you will conduct next semester in PSYC 212. All of these assignments will contribute to the “Proposal & Proposal Writing Process” portion of your final course 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	=	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.*

### **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.

### **Other Important Information**

#### Access to Files/Computing Resources

We will work with SPSS files that will be saved for class use on the **p drive** in the Psychology folder in the file named "PS211Toedter". The p drive cannot be accessed from off campus.

#### Contacting Me

**Office Hours:** Mondays, Wednesdays & Thursdays 1-2:30pm

*Or by appointment*

My office hours will also be posted on Blackboard (including any necessary changes for a given week).

(email: [meljt01@moravian.edu](mailto: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 with learning disabilities who need special accommodations for this course should contact Mr. Joe Kempfer in Learning Services at 1307 Main Street (ext. 1510). Accommodations cannot be provided until authorization is received from Learning Services based upon proper documentation of the conditions and needed

accommodations. 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!]

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.

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>	<u>Readings &amp; Major Assignments</u>
(1) Mon 1/16	Introduction to the Course	None
(2) Wed 1/18	Ways of Knowing	Jackson, Ch 1
(3) Mon 1/23	The Research Process	<b><i>Quiz, Jackson Ch 1</i></b> <b>DUE:</b> Long Topic List
(4) Wed 1/25	Information Literacy	Dunn, Ch 2 Jackson, Ch 2
(5) Mon 1/30	Research Ethics	<b><i>Quiz, Jackson Ch 2</i></b>
(6) Wed 2/1	Writing Workshop I	<b>DUE:</b> Best 3 Topics Dunn, Ch 1 & [Do #1,3 & 5 at end of chapter]
(7) Mon 2/6	Measuring Variables I	Jackson, Ch 3 <b><i>Quiz, Jackson Ch 3</i></b>
(8) Wed 2/8	Measuring Variables II	Dunn, Ch 3 & [Do #1]
(9) Mon 2/13	Measuring Variables III	<b>DUE:</b> Annotated Bibliography
(10) Wed 2/15	Research Design I	Prepare for Exam
(11) Mon 2/20	<b>Exam #1</b>	Prepare for Exam
(12) Wed 2/22	Writing Workshop II	<b>DUE:</b> Structured article critique outline
(13) Mon 2/27	Research Design II	Jackson, Ch 9 <b><i>Quiz, Jackson Ch 9</i></b>
(14) Wed 2/29	Research Design III	<b>DUE:</b> Research Proposal Outline

***Spring Break ---Enjoy!***

<u>Date</u>	<u>Topic</u>	<u>Readings &amp; Major Assignments</u>
(15) Mon 3/12	Observational Methods	Jackson, Ch 4
(16) Wed 3/14	Survey Construction	<b><i>Quiz, Jackson Ch 4</i></b> <b>DUE:</b> Structured Critique (Draft)
(17) Mon 3/19	Frequency Distributions	Dunn, Ch 4 & do # 1
(18) Wed 3/21	Graphing	Jackson, Ch 5, pp. 104-113 <b><i>Quiz, Jackson Ch 5, Part 1</i></b> Dunn, Ch 5 & [Do #1, & #9 for your Introduction]
(19) Mon 3/26	Measures of Central Tendency	<b>DUE:</b> Structured Critique Narrative (Final)
(20) Wed 3/28	Writing Workshop III	<b>DUE:</b> Draft of Intro. to Proposal
(21) Mon 4/2	<b>Exam #2</b>	Prepare for Exam
(22) Wed 4/4	Variability & Skew	Jackson, Ch 5, pp. 114-133 <b><i>Quiz, Jackson Ch 5, Part 2</i></b>
	<b><i>Easter Break ---Enjoy!</i></b>	
(23) Wed 4/11	z scores	<b>DUE:</b> Proposal Draft 1
(24) Mon 4/16	z scores	Jackson, Ch 6
(25) Wed 4/18	Correlation	<b><i>Quiz, Jackson Ch 6</i></b>
(26) Mon 4/23	Correlation	Work on proposal
(27) Wed 4/25	Correlation & Regression	<b>DUE:</b> Proposal Draft 2

At Final Exam: Proposal draft 3 **DUE** if needed