Psychology 211

Experimental Methods and Data Analysis I

Fall 2007

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Class meets on M and W 8:30am - 10am

Office hours: MW 1:30-3pm; F 8:30-10:30am

Scientific method as the means through which knowledge advances in the field of psychology. Developing and researching hypotheses, collecting data, testing hypotheses using appropriate statistical techniques, interpreting and reporting statistical results. Research methodology, descriptive statistics, and inferential statistics, as well as computer software Statistical Packages for the Social Sciences to analyze psychological data. Students will be responsible for researching a topic and creating a research proposal. Writing intensive. *Prerequisite:* Psychology 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 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.

Important Suggestion: Read and work ahead. Always read a chapter in advance of the day we discuss it in class. If you do, issues you are uncertain about will likely become clear. If not, you can ask specific questions so I can guide you to understanding the concept. If you do not read ahead and work on assigned problems, you risk becoming lost very quickly while the rest of the class moves ahead. *Read and work ahead.*

Required Books:

Dunn, D. S. (2008). *A Short Guide to Writing about Psychology* (2nd ed.). New York: Pearson Longman.

Green, S. B., & Salkind, N. J. (2005). *Using SPSS for Windows and Macintosh: Analyzing and understanding data.* Upper Saddle River, NJ: Pearson Prentice Hall.

Heiman, G. W. (2001). *Understanding Research Methods and Statistics: An Integrated Introduction for Psychology* (2nd ed.). Boston: Houghton-Mifflin.

Course Matters

Attendance. 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. I will be passing out a sign-in sheet at the start of every class. Too many missed classes will lower your final grade.

Obtain a calculator. Please purchase an inexpensive ($5 - $10), basic calculator for this class, one that has some memory functions and a square root key. Do **not** purchase a sophisticated, statistical or "scientific" calculator for this class. You will be simple, straightforward performing hand calculations using the calculator. Programmed analyses will be performed as we learn to use SPSS (Statistical Package for the Social Sciences).

Course assignments. There will be some in-class and some take-home assignments due over 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.

Late policy for course work. Late homework assignments and ungraded portions of the proposal will *not* be accepted. There are no exceptions to this rule. Late papers (i.e., graded portions of the proposal or the proposal itself) will be accepted for no more than three days after the due date. The penalty for a late paper is 1 complete letter grade reduction for each day a paper is late (the first drop in a grade occurs once I collect the assignment, usually at the start of class). After the three days are over, a grade of "0"will be given for the missed assignments. No exceptions will be made to this rule, even in the case of legitimate and documented excuses, technical difficulties (e.g., computer or car), weather issues, and personal problems. *You should be working on your project on an on-going basis so that you will always have something to submit.* You may *not* email an assignment to me unless we discuss it and I inform you that I will accept it. I want hard copies of all work to be submitted by you in class. For example, I will not accept an assignment that is emailed to me while the class is meeting.

Plagiarism and cheating. Your work must be your own. The College has a detailed plagiarism policy. I assume you are already familiar with it. I am happy to discuss it with you if you have questions. I will follow it to the letter. Please visit: http://www.moravian.edu/studentLife/handbook/academic2.htm to view the policy.

Exams. There will be two in-class exams and a final exam. The exams will contain short answer questions, essay questions, and problems. Exams can contain material from our texts (including material *not* discussed in class), lecture, and class discussion.

Make-up exams. **There are no make-up exams**. If you miss an exam for an extraordinary and documented reason (e.g., serious illness) *and* I know in advance *and* I accept the reason, I will assign you a grade based on the average of the other exam and the final (e.g., 75 + 83 = 158/2 = 79). If your reason is not an adequate one, then you will receive a score of zero (0) for the missed exam.

Research proposal. Across the semester, you will be working on a research proposal—design for an experiment—for a project that you will conduct from start to finish next semester (spring 2008). The proposal has multiple parts, each building upon the other. Your research proposal, which is due toward this semester's end and must be written in APA-style, will have a title page, an abstract page, an introduction, a Method section, a potential Results section, a References section (containing *at least* 8 references), and an Author Notes page (refer to Dunn [2008], especially chapter 5). Some parts of the proposal will be submitted in advance and will be ungraded (you will, however, receive comments); 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.

Help with course material. Doing well in this course is not difficult if you are diligent, organized, and if you spend a reasonable amount of time outside of class reading, doing homework, etc. I will be delighted to discuss the course material with you, but you must seek me out during my office hours or schedule an appointment. It is your responsibility to let me know if you are having difficulty with the material. As much as I would like to, I cannot read your mind—you must ask for help or let me know how I can help you. *Don't wait.*

Grading. Your class grade will be based on the following items and percentage weights:

Exam 1	15%
Exam 2	15%
Final Exam	15%
Possible Research Topics	5%
Outline Draft w/APA style References	5%
Introduction Draft and Submitted Draft	5%
Method Draft and Submitted Draft	5%
Other miscellaneous homework & lab work	5%
Research Proposal	20%
Attendance & Participation	10%

I will use the following grading scale for course work:

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

Office hours. My office hours at Moravian for Fall 2007 are:

Monday	1:30pm – 3pm
Wednesday	1:30pm - 3pm
Friday	8:30am - 10:30am

When necessary appointments for other times may be scheduled.

Note about the syllabus. Readings should be completed before class on the dates noted herein. I reserve the right to alter the syllabus should the need arise.

Homework Assignments in Heiman Text

Each chapter in the Heiman text ends with (1) *Review Questions* and (2) *Practice Problems*. I strongly urge you to read and do the questions and problems when you finish reading a chapter and when you review for a given exam. *Note well: Questions and problems on exams will be very, very similar to the Review Questions and Practice Problems.*

I will not be assigning specific Practice Problems until we reach chapter 6—when we begin to learn about calculating statistics and doing data analyses. Will I be collecting homework regularly? No. I will collect homework problems at random in class—if you have done them and can submit them that day, you will earn extra points tacked on to your final course grade. If you have nothing to submit that day, then you will receive no points. *You may not submit homework after I collect it at random.* Please don't ask to do so.

I am happy to discuss homework problems in class or during my office hours. Let me be very clear: Doing the Practice Problems (answers to the odd-numbered questions appear at the back of the text) is the single best way to learn the material. If you do not practice using the formulas, then you will not learn the underlying concepts. You need to have both skills in order to complete the problems given during in-class exams.

Assigned Homework:

Chapter 6 – 15, 17, 18, 20, 21, 23, 27

Chapter 7 – 11, 13, 14, 22, 25

Chapter 8 – 13, 15, 19, 23

Chapter 9 – 15, 16, 19, 20, 24, 25

Chapter 10 – 13, 16, 18, 19, 22, 24

Chapter 11 – 17, 19, 23, 24, 26

D = Dunn text
H = Heiman text
G&S = Green & Salkind text
*** = Homework Problems Assigned (see page 5 of this syllabus) – Homework will be collected at random (if at all) – thus, you should have the problems completed on or after the date noted on the syllabus.

I anticipate following this schedule, however, I reserve the right to change it if the need arises (e.g., inclement weather).

Class Schedule for Fall 2007

M Aug 27	Organizational Meeting Data Collection	
W Aug 29	The Scientific Method Data Entry	H ch. 1
M Sep 3	*Labor Day – No Class Meeting*	
W Sep 5	Writing in Psychology	D ch. 1
M Sep 10	Design and Interpretation	H ch. 2
W Sep 12	Thinking about ResearchTopics	D ch. 2
M Sep 17	Reliability & Validity *bring list of 3 possible topics	H ch. 3
W Sep 19	Design Issues I & Ethics Refining Research Topics	H ch. 4
M Sep 24	Library Research Workshop	
W Sep 26	Design Issues II & Review	H ch. 5
M Oct 1	***EXAM 1***	
W Oct 3	Reading & Critiquing Research	D ch. 3
F Oct 5	***Midterm Point of the Semester***	
Sa Oct 6 – Tu Oct 9	***Fall Recess***	
W Oct 10	Getting Started Writing *bring an outline w/APA style	D ch. 4, 7

references to class

M Oct 15	Introduction to Statistics: Frequency	H ch. 6***
W Oct 17	Central Tendency	H ch. 7***
M Oct 22	Writing APA Style Papers Research Proposal Format *No Class Meeting*	D ch. 5
W Oct 24	Variability	H ch. 8***
M Oct 29	DRAFT Proposal Writing Workshop *bring a draft of your introduction to class	
W Oct 31	Catch up & Review for Exam 2	
M Nov 5	***EXAM 2***	
W Nov 7	z-Scores	H ch. 9***
M Nov 12	DRAFT Proposal Writing Workshop *bring a rough draft of your Method to class ***Submit introduction***	
W Nov 14	Correlation	H ch. 10***
M Nov 19	Correlation con't ***Submit Method***	
T Nov 20 – Su Nov 25	***Thanksgiving Break***	
M Nov 26	Regression	H ch. 11***
W Nov 28	Regression con't & Proposal Discussion	H ch. 11
M Dec 3	***Final Proposal Draft Due***	
W Dec 5	Catch Up Day and Looking Ahead to PS 212	
M Dec 10	Review for Final Exam	
W Dec 12 – W Dec 19	*Final Exam Period*	

*** Date and Time of Our Final TBA