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Fall 9-1-2018

### PSYX 120.01: Research Methods I

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# **Introduction to Psychology Research Methods (Research Methods I)**

**Psyx 120, section 01 (CRN 70903)**

**Fall, 2018**

## **Course Location and Time**

**Chem 123**

Tuesday-Thursday, 2:00-3:20

## **Instructor Information**

Instructor: Susan Greene M. A.

Office: Skaggs Building (SB) 004

Office Hours: 1-1:45 Tuesday and Thursday, or by appointment

Main Psychology Office: SB 143

Email: [susan.greene@umontana.edu](mailto:susan.greene@umontana.edu)

## **Required Text** (one of the following editions)

*Research Methods in Psychology*, Elmes, Kantowitz, & Roediger (**9<sup>th</sup> edition**), ISBN-10: **1111350744**.  
Available at for purchase at the UC bookstore and on-line.

**OR**

*Research Methods in Psychology*, Elmes, Kantowitz, & Roediger (**8<sup>th</sup> edition**), ISBN-10: 0534609767.  
Available at for purchase at the UC bookstore and on-line. (This syllabus and the course have been set up so that you can use any of these two editions of the text. Schedule is set for 8<sup>th</sup> edition, ask for potential changes in 9<sup>th</sup> edition).

## **Moodle On-line System**

Course announcements, additional class materials, and the class project drop box for the reaction paper will be on the [Moodle](#) site. There you will find a copy of this syllabus, additional readings, and PowerPoint supplemental materials. I will also post suggestions for optional readings if you are interested in further information about a particular topic, as well as relevant websites and other resources. Please email me topics if interested in having these additional articles posted. [IT Central Help Desk](#): 243-4357 (8am-5pm).

Be sure to use your official UM e-mail address with Moodle. You will need to have and use a university e-mail address and to check it regularly; students must use a university e-mail address in electronic correspondence for this course.

[Textbook website \(contains useful study aids\)](#)

## Grading

Your grade in this course is based on a total of 210 points. This is made up for 180 points from your three best (of four) exams, worth 60 points each, and a class project, worth 30 points. There may also be occasional exercises that provide extra credit.

## Grade Scale

The grade scale in this class uses “plus” and “minus” grades. Note that a grade of C or better is needed for required Psychology courses.

Grade	Percentage $\geq$	Points for GPA computation	Minimum Points Needed
A	93	4.0	195
A-	90	3.7	189
B+	87	3.3	182
B	83	3.0	174
B-	80	2.7	168
C+	77	2.3	161
C	70	2.0	147
D	60	1.0	126
F	59 or lower	0	123

## Exams

There will be 3 midterm exams and a comprehensive (cumulative) final exam. All of the exams are worth 60 points and consist of approximately 25 multiple choice or true/false items (2 point each) and 1 short answer essay question (10 points).

There are no make-up examinations for individual exams except in cases of true, documentable emergencies. Arrangements to miss an exam must be made before the time of the exam.

The lowest exam score of the 4 exams (including the final) will automatically be dropped, and the three highest exam scores are used for the calculation of your final grade. Both lecture and book material will be covered on each exam. The final examination is optional; if you are satisfied with your grade based on the three midterms and project, you need not take the final.

### **Class project**

There is also a class project, worth 30 points. This class project will be conducted on September 28<sup>th</sup>, and students will be required to attend class to get credit. If you are unable to attend class, you will need to contact me ahead of time in order to get an alternate assignment.

The class project will involve students splitting into groups based on an assigned question. Students will split up and collect data from various places around campus and hand the data in by then end of the class period. A one page, double spaced, reaction paper will be due for each student by the Exam 2 detailing the students individual experience conducting the research, and if and how it helped the student in the class.

### **Lecture Topics**

Lectures will frequently derive from student questions and supplemental materials. Outline of the PowerPoints will be posted on Moodle and can be printed and brought to class for note-taking.

### **Extra Credit**

Extra credit exercises may be available, and will be announced in class and through email.

### **Course Goals and Objectives**

One of the goals of the course is to help the student understand how psychology fits into the larger enterprise of science. We will start with an examination of some of the important characteristics of science: induction and deduction, the importance of theories, the necessity for empirical observations, and the social aspect of science.

We will consider the main methods that psychologists use to gain information about psychological concerns. We will discuss the experimental method, the correlational (relational) method, and some quasi-experimental methods. You will be expected to know the advantages and disadvantages of each method. A technical vocabulary goes with each, and you will be expected to be very well acquainted with the meaning of these terms. Concepts such as internal and external validity, independent and dependent variables, and confounding are used all the time in psychological research, and an understanding of the meaning of the words and how they are applied is essential.

Three widely used experimental designs will be discussed; the between-subjects, the within subjects, and mixed designs. The course will also cover "complex" (multi-factorial) designs. You will be expected to be familiar with the characteristics of each and their advantages and disadvantages. You will be expected to be able to construct a graph that represents data in a meaningful way and to know how to interpret graphs of data from both single variable and factorial experiments.

Statistics are an integral part of the research process and you will be exposed to the very basics of descriptive and inferential statistics. Since this is not a course in statistics, you will not be required to memorize formulae or computed values. But you will be expected to know what these statistical tools do for us and how they help us make rational decisions about data.

Most of the course will be devoted to how to do psychological research, but an equally important question is whether to do the research. Is this research ethical? We will consider ethical issues in research toward the middle of the semester.

Your mastery of the topics described above will be assessed on tests using a multiple-choice and short-answer format, as well as on the basis of class project completion. The questions will tap your knowledge of the meaning of technical terms and your ability to apply these terms in particular situations.

## **Course Guidelines and Policies**

### **Schedule Changes**

This schedule is subject to change. Students are responsible for knowing about changes in assignments and schedules that may be announced in class, on Moodle, or via e-mail.

### **Add/Drop**

Through the first fifteen (15) instructional days of the semester, students may use [CyberBear](#) to drop courses. For courses dropped by the fifteenth instructional day, no fees are charged and courses are not recorded. After this date, a grade of “WP” or “WF” will appear on the transcript. Petitions to drop will be granted only in documentable emergency cases. Note that course failure, in and of itself, does not constitute an emergency. Please plan accordingly.

### **Disability Modifications**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and [Disability Services for Students](#). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or call 406.243.2243. I will work you and Disability Services to provide an appropriate modification.

All materials in this course are intended to be accessible. If you have any trouble with accessing any course material, please let me know, or you can contact [Disability Services for Students](#).

### **Incompletes**

Departmental and University policies regarding Incompletes do not allow changing “Incomplete” grades after one year after an “I” has been granted.

### **Plagiarism**

Plagiarism or cheating of any kind will not be tolerated. Plagiarism is stealing or passing off the ideas or words of another as one's own without properly crediting the source. This behavior is unethical and a violation of the [Student Conduct Code](#). Evidence of either plagiarism or cheating may result in an automatic “F” for that assignment and a deduction of 40 points from the final grade. The instructor also reserves the right to assign an “F” as a final grade if either cheating or plagiarism occurs.

## **Psychology Department Information**

The website for the [Department of Psychology](#) has important information pertaining to psychology major and minor requirements, admission requirements, Psych 100, supervised research, etc. If you are a psychology major, or are thinking about becoming one, this is important information for you to review. In addition, the website provides links to sites with information on graduate school admissions, graduate programs, and careers in psychology. If you are at all interested in pursuing graduate study or employment in psychology, you can use these links as a starting place for your research on programs.

### **Attendance**

Attendance in class is up to the student but please come to class on time and stay for the entire period. Students need to attend regularly and participate in class discussions in order to do well in this class.

### **Cell Phones and related technology**

Students are expected to practice cell phone and computer etiquette in class. Make sure cell phones and pagers are turned off (or set to vibrate) during class. Please do not engage in excessive texting or online activity during class. Cell phones use, texting, use of mp3 players, etc. are not permitted during in-class exams.

### **Academic Honesty**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

### **Student Conduct Code**

All students need to be familiar with the [Student Conduct Code](#).

## Tentative Course Schedule

Week	Readings	Tuesdays	Thursdays
<b>Week 1 (8/27 - 8/31)</b>	Introduction, Chapter 1	Introduction	Chapter 1
<b>Week 2 (9/3 - 9/7)</b>	Explanation in Scientific Psychology, Chapter 2	Chapter 2	Chapter 2
<b>Week 3 (9/10 - 9/14)</b>	Exploring the Literature of Psychology, Chapter 3	Chapter 3	Chapter 12
<b>Week 4 (9/17 - 9/21)</b>	Conducting Ethical Research, Chapter 12	Chapter 12	<b>Exam 1</b>
<b>Week 5 (9/24 – 9/28)</b>	Observations in Psychological Research, Chapter 4	Chapter 4	<b>Class Project</b>
<b>Week 6 (10/1 - 10/5)</b>	Relational Research, Chapter 5 Basics of Experimentation, Chapter 6	Chapter 5	Chapter 6
<b>Week 7 (10/8 - 10/12)</b>	Validity and Reliability in Psychological Research, Chapter 7	Chapter 6	Chapter 7
<b>Week 8 (10/15 – 10/19)</b>		Chapter 7	<b>Exam 2</b>
<b>Week 9 (10/22 – 10/26)</b>	Experimental Design, Chapter 8	Chapter 8	Chapter 8
<b>Week 10 (10/29 – 11/2)</b>	Complex Designs, Chapter 9	Chapter 9	Chapter 9
<b>Week 11 (11/5 – 11/9)</b>	Small-n Experiments, Chapter 10	<i>Election Day (No Class)</i>	Chapter 10
<b>Week 12 (11/12 – 11/16)</b>	Quasi-Experimentation, Chapter 11	Chapter 11	Chapter 11
<b>Week 13 (11/19 – 11/23)</b>		<b>Exam 3</b>	<i>Thanksgiving (No Class)</i>
<b>Week 14 (11/26 – 11/30)</b>	Interpreting the Results of Research, Chapter 13	Chapter 13	Chapter 13
<b>Week 15 (12/3 – 12/7)</b>	Presenting Research Results, Chapter 14	Chapter 14	Chapter 14
<b>Week 16 (12/10 – 12/14)</b>		<b>Final Exam</b> Tuesday Dec 11 from 3:20 to 5:20	