

1-2014

## PSYX 120.02: Research Methods I

Paul Silverman

*University of Montana - Missoula, paul.silverman@umontana.edu*

**Let us know how access to this document benefits you.**

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

---

### Recommended Citation

Silverman, Paul, "PSYX 120.02: Research Methods I" (2014). *Syllabi*. 2401.  
<https://scholarworks.umt.edu/syllabi/2401>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

## INTRODUCTION TO PSYCHOLOGICAL RESEARCH METHODS

### PSYX 120 (2)

The University of Montana

**Dr. Paul Silverman**

**Phone: 243-6349**

**e-mail: [paul.silverman@umontana.edu](mailto:paul.silverman@umontana.edu)**

**Office: Skaggs 366**

**Office Hours: TWTh 10-11 am**

**[Psyc Dept Web Page](#)**

**Spring 2014**

**2:10-3:30 pm, TTh**

**Interdisciplinary Sciences (ISB) 110**

The purpose of this class is to introduce you to research methods in psychology. I hope that you will become a critical consumer of scientific research, as well as begin to develop understanding and skill in planning research. More generally, I hope that this experience will “tune you” as an informed skeptic! We will consider such topics as scientific reasoning as it relates to psychology, the key methods used by psychologists to acquire information, experimental and non-experimental designs, the use of statistical tools for analyzing data, and the ethics of research. Students are expected to participate in in-class and on-line discussions, to write a review of a research article, and to develop and write a brief research proposal. The two writing projects are due late in the semester because they require mastery of much of the textbook and lecture material. Be sure to plan your time with this in mind!

This syllabus, an updated record of your grades, a class participation discussion forum, and instructions for the Research Review and Research Proposal (as well as other important material) is available to you on the “Moodle” class website. You may access this by going to the UM home page, clicking the UM Online tab, and logging in using your UM NetID and password. Technical assistance is available to you as follows: UMOOnline Technical Support-406.243.4999 or [umonline-help@umontana.edu](mailto:umonline-help@umontana.edu)

**Grades** will be determined from performance on:

A. Seven tests (106 points each)	742 points
B. Article Review	100 points
C. Research Proposal	100 points
D. Class Participation	<u>60 points</u>
	1,002 points

In addition, you have the option of earning up to 60 extra-credit points writing one or two Synthesis/Reaction Papers, taking sections of an on-line research ethics course, attending Psychology Department research colloquia, or participating in Psychology Department research. Instructions for earning extra-credit are available on the class website.

**Your course grade** will correspond to total points as follows: A = 900-1002; B = 800-899; C = 700-799; D = 600-699; F = 0-599; Pass = 600-1000; Fail = 0-599.

**Textbook:** Leary, M.R. (2011). *Introduction to Behavioral Research Methods*, 6<sup>th</sup> Edition. Boston: Pearson Education, Inc.

There is no publisher's on-line study guide available. However, each textbook chapter ends with a list of key terms and practice questions and either partial or complete lecture notes will be made available to you on the course website.

**Class meetings** will follow a lecture format for the most part and will also include demonstrations in which we informally “conduct” research using the class members as both subjects and scientists. Questions and discussions will be enthusiastically welcomed at any time! You are expected to read the assigned textbook chapters and master concepts presented in lectures, demonstrations, videos, and the text. Students are likely to find the textbook and lecture material highly technical and challenging. To do well in this course you are most strongly encouraged to attend all lectures, read the textbook, and engage in study time to learn concepts. You should use the review material following each chapter.

**Tests** will be multiple-choice and/or short answer and will cover material presented both in lecture and readings. Each will be given during the first 40 minutes of the scheduled class period. Lecture and discussion will resume after each test. Make-up tests will be arranged only for reasons of illness or previously excused absence. Prior to each test a review which highlights of topics covered on the test will be posted on the class website. In addition, an evening Q&A session with Dr. Silverman will be scheduled before each test. You will need 7 scantron cards, one for each test. These can be purchased at the UM Bookstore and are labeled “Pearson NCS Test Sheet 50/50.” They are light blue on one side; light green on the other, with room for 50 items on each side (the actual tests will contain approximately 30 to 35 items). You will also need to bring a No. 2 pencil to fill out each card.

**The Article Review** will be a project that consists of a summary, analysis, and critique of a published psychological study. You will be asked to identify and photo-copy a journal article and to submit it to Dr. Silverman for approval. After your article has been approved, you will submit a brief written report (2 to 3 pages). Details of this assignment are available to you to download from the class website and will be discussed in class.

**The Research Proposal** will be a brief paper in which you write a proposal for your own research study. You will be asked to propose a study that is related to the journal article that you previously reviewed. The resulting report will be 2 pages in length. This assignment is also explained in depth on the website. Make note that writing a Research Proposal requires that you have read chapters 1-11 as well as chapters 16 and 13. These last two chapters are covered in class shortly before the Proposal is due. I recommend that you acquaint yourself earlier with the material so that you will have more than one week to work on the Proposal.

**Class participation** will be graded using a formal system. Using the “Moodle” website, scroll down to “Research Methods Forums” in the course menu (left-hand column), then click on the “**Lectures and Text Forum**” and respond to a topic thread or start your own. Your message should include a question or comment based on one of the assigned chapters, lectures, or discussions for the week. It may also consist of a response to another student's question or comment. I may occasionally post a discussion topic, but generally this forum is for you to have your own discussions. You are required to participate on the Lectures and Text Forum at least once per week (at least 15 times). In order to encourage you to spread your submissions

throughout the semester, **during the last 2 weeks of class (April 29-May 13) only 2 submissions will be counted.** You will receive credit for your participation, pro-rated to a possible 60 points. I will respond to some comments or questions through the Forum and will also present some for in-class discussion.

All students must practice academic honesty. Academic honesty is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online [Student Conduct Code](#). Some students are not aware of what plagiarism is and do not know that it is unethical. Plagiarism is the presentation of another person's ideas or writing as one's own. In this class, both plagiarism and cheating on tests and papers will result, at minimum, in the assignment of an "F" to the test or paper and the deduction of 100 points from the final grade. I reserve the right to assign an "F" for the course if either occurs. If you find that you have questions about the material covered, or problems in any other aspect of the course, I urge you to meet with me either during office hours or by making an appointment

This course is accessible to and usable by otherwise qualified students with disabilities. To request reasonable program modifications, please consult with the instructor. Disability Services for Students will assist the instructor and student in the accommodation process. For more information, visit the [Disability Services website](#).

## **COURSE SCHEDULE**

<b><u>Dates</u></b>	<b><u>TOPICS</u></b>	<b><u>READINGS</u></b>
Jan 28, Feb 4	Course Orientation; Research in the Behavioral Sciences; Exploring the Literature in Psychology	(Chpt 1)
Feb 6, 11, 13	Behavioral Variability and Research	(Chpt 2)
<b>Feb 13</b>	<b>Test 1 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>Feb 17</b>	<b>Presidents Day- no classes</b>	
<b>Tues Feb 18</b>	<b>TEST 1, Chapters 1, 2</b>	
Feb 18, 20	The Measurement of Behavior	(Chpt 3)
Feb 25	Approaches to Psychological Measurement	(Chpt 4)
<b>Feb 25</b>	<b>Test 2 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>Thurs Feb 27</b>	<b>TEST 2, Chapters 3, 4</b>	
Feb 27, March 4	Selecting Research Participants	(Chpt 5)
<b>March 4</b>	<b>Turn in a copy of the research article you propose to review</b>	
March 6	Descriptive Research	(Chpt 6)
March 6	<b>Test 3 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>March 11</b>	<b>Review Article with "OK/not OK" returned to you</b>	
<b>Tues March 11</b>	<b>TEST 3, Chapters 5, 6</b>	
March 11,13	Correlational Research	(Chpt 7)
March 18,20	Advanced Correlational Strategies	(Chpt 8)
March 20	<b>Test 4 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>Tues March 25</b>	<b>Test 4, Chapters 7, 8</b>	
March 25,27	Basic Issues in Experimental Research	(Chpt 9)

<b>March 31-April 4</b>	<b>Spring Break</b>	
April 8, 10	Experimental Design	(Chpt 10)
	(Note: Chapter 12, Analyzing Complex Experimental Designs, is NOT assigned)	
<b>April 10</b>	<b>Article Review Due</b>	
<b>April 10</b>	<b>Test 5 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>Tues April 15</b>	<b>TEST 5, Chapters 9, 10</b>	
April 15,17	Analyzing Experimental Data	(Chpt 11)
<b>April 22</b>	<b>Article Review returned to you</b>	
April 22	Scientific Writing	(Chpt 16)
April 22	<b>Test 6 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>Thurs April 24</b>	<b>TEST 6, Chapters 11, 16</b>	
April 24, 29	Quasi-Experimental Designs	(Chpt 13)
May 1	Single-Case Research	(Chpt 14)
May 6, 8	Single-Case Research, continued; Ethical Issues in Behavioral Research	(Chpt 15)
<b>May 8</b>	<b>Research Proposal Due</b>	
<b>May 8</b>	<b>Test 7 Evening Q&amp;A</b> (7 pm, Skaggs 303)	
<b>Tues May 13</b>	<b>TEST 7, Chapters 13, 14, 15</b> (1:10-3:10 pm)	
<b>May 15</b>	<b>5 pm Deadline for extra credit</b>	

#### **IMPORTANT NOTES:**

- (1) **Be aware of- and plan for test and paper due-dates!** The due-date for your research article review is April 10 and it will be returned to you with feedback on April 22. Your research proposal is due only 3 weeks later on May 8. This schedule squeeze is made necessary by the need to cover certain textbook chapters before each assignment is due.
- (2) Click on this link for spring 2013 dates and deadlines regarding **Advising, Registration, Adding and Dropping Classes, Withdrawing:**  
[http://events.umt.edu/?calendar\\_id=27&upcoming=upcoming](http://events.umt.edu/?calendar_id=27&upcoming=upcoming)
- (3) The above schedule and procedures in this course are subject to change in the event of extenuating circumstances. One of these circumstances is that someone finds a mistake on the syllabus! If (when?) this happens, I will update the syllabus and notify you about this via email. It is possible that a test date will change if we have not yet covered the material. I will notify you at least two class sessions in advance.