

University of Montana

ScholarWorks at University of Montana

University of Montana Course Syllabi

Open Educational Resources (OER)

Spring 1-2016

PSYX 120.02: Research Methods I

Paul S. Silverman

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

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

Let us know how access to this document benefits you.

Recommended Citation

Silverman, Paul S., "PSYX 120.02: Research Methods I" (2016). *University of Montana Course Syllabi*. 3963.

<https://scholarworks.umt.edu/syllabi/3963>

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

Introduction to Psychological Research Methods – Psyx 120

Spring 2016

Course Location and Time

Interdisciplinary Science Building, Room 110
TTh 2:10 – 3:30pm

Instructor Information

Instructor: Dr. Paul Silverman
Phone: 406-243-6349
Email: paul.silverman@umontana.edu
Office: Skaggs 366
Office hours: Tuesday, Thursday 3:30-4:30 pm; Wednesday 1-2:00pm
[Department of Psychology website](#)

Required Text

Leary, M.R. (2012). Introduction to Behavioral Research Methods, 6th 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.

Course Overview

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!

Moodle

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 via [UM IT Support](#) or umonline-help@umontana.edu or 406-243-4999.

Course Organization/Attendance

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.

Grading

Grades will be determined from performance on:

- Seven tests (106 points each): 742 points
- Article Review: 100 points
- Research Proposal: 100 points
- Class Participation: 60 points
- Total: 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.

Exams

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.

Article Review

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.

Research Proposal

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

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 25-May 6) 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.

Course Guidelines and Policies

Academic Honesty

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](#). 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.

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.

Course Questions/Issues

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 or with a TA assigned to the class.

University Drop Dates and Deadlines

For more information on deadlines and drop dates, please go to the [Registrar’s Office website](#).

Course Schedule

| Date | Topics | Readings |
|------------------------|---|--------------|
| Jan. 26, 28 | Course Orientation; Research in the Behavioral Sciences; Exploring the Literature in Psychology | Chapter 1 |
| Feb. 2, 4 | Behavioral Variability and Research | Chapter 2 |
| Feb.4 | Test 1 Evening Q&A (7pm Skaggs 303) | |
| Tuesday, Feb. 9 | TEST 1, Chapters 1, 2; The Measurement of Behavior | Chapter 3 |
| Feb. 11, 16 | The Measurement of Behavior; Approaches to Psychological Measurement | Chapter 3, 4 |
| Feb. 18 | Approaches to Psychological Measurement | Chapter 4 |

| Date | Topics | Readings |
|------------------------------------|---|------------|
| Feb. 18 | Test 2 Evening Q&A (7pm Skaggs 303) | |
| Tuesday, Feb. 23 | TEST 2, Chapters 3, 4; Selecting Research Participants | Chapter 5 |
| Feb. 25 | Selecting Research Participants | Chapter 5 |
| March 1 | Descriptive Research; Turn in copy of research article you propose to review | Chapter 6 |
| March 3 | Descriptive Research | Chapter 6 |
| March 3 | Test 3 Evening Q&A (7pm Skaggs 303) | |
| Tuesday, March 8 | TEST 3, Chapters 5, 6 Review Article w/ "OK/not OK" returned to you; Correlational Research | Chapter 7 |
| March 10, 15, | Correlational Research | Chapter 7 |
| March 17, 22 | Advanced Correlational Strategies | Chapter 8 |
| March 22 | Test 4 Evening Q&A (7pm Skaggs 303) | |
| Thursday, March 24 | TEST 4, Chapters 7, 8; Basic Issues in Experimental Research | Chapter 9 |
| March 29 | Basic Issues in Experimental Research | Chapter 9 |
| March 31 | Basic Issues in Experimental Research | Chapter 9 |
| April 4-8 | Spring Break | |
| April 12 | Experimental Design Note: Chapter 12, Analyzing Complex Experimental Designs, is NOT assigned | Chapter 10 |
| April 12 | Article Review Due | |
| April 12 | Test 5 Evening Q&A (7pm Skaggs 303); | |
| Thursday, April 14 | TEST 5, Chapters 9, 10; Analyzing Experimental Data | Chapter 11 |
| April 19, 21 | Analyzing Experimental Data; Article Review returned to you | Chapter 11 |
| April 26 | Scientific Writing | Chapter 16 |
| April 26 | Test 6 Evening Q&A (7pm Skaggs 303) | |
| Thursday, April 28 | TEST 6, Chapters 11, 16 Quasi-Experimental Designs | Chapter 13 |
| May 3 | Single-Case Research | Chapter 14 |
| May 5 | Ethical Issues in Behavioral Research Research Proposal Due | Chapter 15 |
| May 5 | Test 7 Evening Q&A (7pm Skaggs 303) | |
| Monday, May 9 (1:10-3:10pm) | TEST 7, Chapters 13, 14, 15; 5pm Deadline for extra credit | |

Important Notes

- Be aware of- and plan for test and paper due-dates! The due-date for your **research article review** is **April 12** and it will be returned to you with feedback on **April 21**. Your **research proposal** is due only two weeks later on **May 5**. This schedule squeeze is made necessary by the need to cover certain textbook chapters before each assignment is due.
- 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.