

**Introduction to Research Methods (PSY 202)**  
**Fall 2016**  
**Class Meetings: MW 9:00-10:20AM, Bass 211**

**Professor**

**Randi L. Garcia, Ph.D.**

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**Office Hours:** Mondays and Wednesdays 2:30 – 3:30 PM or by appointment

**Course Description**

This course provides a foundation for understanding how psychologists conduct scientific research. You will learn major methods of research design and assessment, critical skills to conduct your own experimental research in psychology, and basic application of quantitative data analysis.

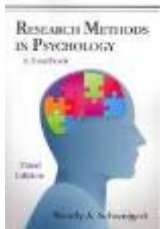
**Course Goals**

- Improve comprehension of basic psychological research methods with a particular focus on experimental design
- Develop ability to critically evaluate psychological research
- Develop and practice specific research skills, such as designing an empirical study, collecting and analyzing data, and writing in APA style
- To prepare you to become knowledgeable consumers and producers of psychological and other scientific research

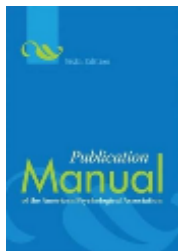
**Course Website**

The course website is accessible in Moodle directly. The website will be used to post the most up-to-date syllabus, assignments, announcements, lecture slides, grades, and other course documents. Check Moodle often!

**Required Texts\***



Schweigert, W.A. (2012). *Research methods in psychology: A Handbook*. Long Grove, IL: Waveland Press, Inc.



*Publication manual of the American Psychological Association (6th ed.)*. (2010). Washington, DC, US: American Psychological Association.

\*Required texts are available in the campus bookstore and are **on reserve at the Young Science Library**. You may decide not to purchase the publication manual, but it is a required text which means you're responsible for all of the content! Research articles, lecture slides, handouts, assignments, and other materials will be available on **Moodle (M)**.

## Important Policies

### Expectations

I expect every student to perform to the highest of their capabilities in this course by attending lectures, reading the assigned texts, and engaging in class discussions/activities. Know that completing every course element does not guarantee an “A” in this course—**giving “bare minimum” effort will earn you the minimum passing grade at best.**

### Class Structure

All students are required to attend class—absences will be noted. Within class sessions I will provide time for you to work on your research project and to meet with your research group, thus missing class might render you out of the loop. In the weeks when we need to analyze data please bring your computer to class for access to the RStudio server (or RStudio on your machine). **If you have more than one unexcused absence from class, your final grade will be lowered by 5%.** If you are consistently absent, your grade may be lowered even more significantly and/or you may be required to work on alternative project. In addition to class attendance, peer evaluations will be given at the end of the semester to increase accountability to your group. Please be respectful of one another, **if your peer evaluation scores or written feedback reflect a consistent lack of participation in your group, this will be negatively factored into your grade.**

### Exams

There will be two exams given during class time—I will be available for questions in my office during this time. They cover material from lecture, in-class assignments and the readings. Exam 2 is not cumulative, though some reoccurring themes appear throughout the course and therefore may be covered on both exams. To be well-prepared for the exams, you should know all key terms and concepts *and* be able to apply them to examples, generate your own examples, and integrate ideas discussed in the course. Questions on the exams will be in a variety of forms, and include multiple-choice, fill-in-the-blank, short answer, and brief essay. **Make-up exams will ONLY be given for exceptional reasons. A request for a make-up exam should be made at least 1 week prior to the scheduled exam.**

### Homework & In-class assignments

Four homework assignments and periodic in-class assignments will be assigned. These are designed to help you practice skills related to conducting and evaluating research, as well as to help you complete the research project. Homework assignments are due **on MOODLE** on the day marked on the syllabus (the instructions for homework assignments will be posted on Moodle). In-class assignments will occur randomly throughout the semester in lecture or lab. **I do not accept late assignments and there are no make-ups for in-class assignments.**

### Research Project/Final Paper

A key goal of this course is for you to develop and practice research skills. In research teams of 3-4, you will work together to complete your own experiment. The paradigm you will use is a hiring decision study (Uhlmann & Cohen, 2005). Your research team will develop your own research question and hypotheses within this paradigm. Your experiment must include **two independent variables** (factors) with two levels each. We will use fictional resumes/applications, across which everything will be equal except for the independent variables you manipulate (e.g., demographics of the applicants, experience). The research question will be how the two independent variables your group selects affect the **dependent variable(s)** (at least 3 DVs with at least survey questions measuring each DV) such as likelihood of applicant being hired, proposed salary, etc. Your research team will collect data from a sample of at least 80 people (in a group of 4 this means 20 people each) and analyze your data using RStudio. **Although you will be working as a group to complete this study, each person will prepare her/his own APA-style research report based on the findings from your experiment (only the Method and Results sections will be written as a group).** A more detailed description of the final report criteria will be provided. You should expect to spend substantial time on the project outside of class; however, some class time each week will be devoted to discussing and working on various aspects of this project. I expect that most research papers will be about **10-15 pages** long including references, title page, abstract, tables, and figures.

### Subject-pool Participation

Psychology is the scientific study of feelings, thoughts, and behaviors and much of our understanding of people and social processes would not be possible without the participation of generous volunteers. Participation in the research process enhances one's ability to become a knowledgeable consumer and producer of psychological research. Several members of the Psychology Department have ongoing research programs on adult human functioning. In addition, many of our junior and senior psychology majors are doing independent research in advanced research courses, special studies, or to complete their senior honors theses. They rely on students to serve as participants for these studies, and you can elect to help them out. **Therefore, you can gain up to 2% extra credit on your grade for the class for participate in 2 hours'** worth of participant pool studies in the Psychology Department at Smith (on MOODLE).

You will receive 1/2 credit for each 1/2 hour of research participation, for a maximum of two (2) full credits. That is, you are required to participate in 4 half-hour (or 2 one-hour) psychology studies being conducted solely at Smith. **Please be advised:** There will be a penalty equal to the value of the research credit being offered if you (a) **fail to show up** for your scheduled appointment or (b) **sign up to partake in a study during a specific time slot and then fail to participate** (e.g., -.5 point for a study worth 1/2 credit; -1 point for a study worth 1 credit, -2 points for a study worth 2 credits). You can find more information about research participation on Moodle in the Research Participation section (please see "Subject Pool Request" forms for descriptions of studies). There you will also find the record of participation downloadable form, which you will use to keep track of and record your research participation. You must turn in a hard copy of the completed form to me no later than **December 12<sup>th</sup>, 2016 at 9 AM**, but may be submitted at any point throughout the semester.

If you would prefer not to participate in a study, you may submit two short papers (one page each) summarizing an empirical study. You may also elect to do one study and one summary. If you select to do the short-paper, you must briefly and accurately summarize two research articles which you find yourself and get approved by me (shoot me an email attaching the paper[s]). These should be papers outside of your research topic for this class but of interest to you. **These are also due no later than December 12<sup>th</sup>, 2016 at 9 AM**, but may be submitted at any point throughout the semester.

## Grading

I understand that you are eager to keep track of your progress in the course. I am just as eager and open to giving you this feedback. Please allow at least 1-2 weeks for graded assignments to be returned. I pledge to work diligently to give you feedback in timely manner.

## Cell Phones and Computers

**Personal laptops are allowed and encouraged in lecture**, but please remain on task—no email, Twitter, Facebook, etc. Cell phones must be placed on vibrate or silent prior to the start of lecture. Text messaging or talking on cell phones during lecture is unacceptable, although I understand if emergency happen. I can see when you are paying attention, and if I have a reason to suspect that a computer is being used for other purposes in class, I reserve the right to ask you to shut it down or not bring it.

## Ground Rules

Open and honest discussion is integral to the success of this course. It is important that we create and uphold an atmosphere of respect of people and ideas. Please refrain from engaging in activities that might have a negative impact on another student's ability to listen, learn, or effectively participate in this class.

## Academic Honor Code

You must always provide appropriate citations for others' work and ideas. Giving other scholars due credit in your written and oral communication is a fundamental social gesture in academic work—a way for us to acknowledge each other's scholarship and signify that we respect each other.

From the [Smith honor code](#) website: "Smith College expects all students to be honest and committed to the principles of academic and intellectual integrity in their preparation and submission of course work and examinations. Students and faculty at Smith are part of an academic community defined by its commitment to scholarship, which

depends on scrupulous and attentive acknowledgement of all sources of information, and honest and respectful use of college resources.” Cases of dishonesty, plagiarism, etc., will be reported to the Academic Honor Board.

### Accommodations

Everyone should have all that they need to succeed in this course. Please send me your accommodation letter, or have the Disability Office work with me. If you need to register for accommodations, please contact the Disability Services office at [ODS@smith.edu](mailto:ODS@smith.edu). Please check out the office [website](#) for more information.

**Final Disclaimer: You are responsible for all the information covered in class (including announcements) whether or not you are in attendance. Please note that this syllabus is subject to change. Any modifications will be announced in lecture or posted on Moodle.**

## Course Elements and Grading

### Final Research Project Paper (37.5% Total)

Research Paper (37.5%) due Thursday, December 22<sup>th</sup> at 12pm

### Exams (30% Total):

Exam 1: (15%) given Monday, October 24<sup>th</sup>

Exam 2: (15%) given Wednesday, December 14<sup>th</sup>

### Homework Assignments (20% Total)

HW 1: (5%) CITI Training due 9/28

HW 2: (5%) Article Summaries due 10/12

HW 3: (5%) Introduction Draft due 11/16

HW 4: (5%) Method/Results Draft due 12/7

### In-Class Assignments (5% Total)

### Attendance and Participation (7.5% Total)

### Subject Pool Participation (up to 2% extra credit)

2 Research Hours OR 2 Article Summaries OR 1 Research Hour and 1 Article Summary (1% each) Can be completed throughout semester until 12/12

<b>Grade brackets</b>	A+: 99-100%	B+: 87-89%	C+: 77-79%	D+: 67-69%
	A: 93-98%	B: 83-86%	C: 73-76%	D: 60-66%
	A-: 90-92%	B-: 80-82%	C-: 70-72%	F: 59% and below

## Lecture Schedule\*

*Note: All readings should be completed before class/lab the day on which they appear on the schedule.*

**M: READING AVAILABLE ON MOODLE**

Date		Topic	Assignments/Notes
<b>Week 1</b>			
9/12	M	Course Introduction	Review Syllabus <b>Complete Pre-Course Assessment by 9/14</b>
9/14	W	Philosophies of Science	Schweigert, Ch. 1
<b>Week 2</b>			
9/19	M	Introduction to Research Paradigm	Uhlmann & Cohen (2005) <b>(M)</b>
9/21	W	Research Ethics	Schweigert, Ch. 2
<b>Week 3</b>			
9/26	M	Using library resources	APA Manual, 1.00-1.06; Schweigert, Ch. 4; <i>get into research groups today!</i>
9/28	W	Research reports & literature searches	Jordan & Zanna (1999) <b>(M)</b> ; APA Manual 6.11-6.32 & 3.00-3.17; <b>HW1: CITI Training due today</b>
<b>Week 4</b>			
10/3	M	The Research Process	Schweigert, Ch. 3; Morling pp. 53-64 <b>(M)</b>
10/5	W	Measurement and Stats	Schweigert, Ch. 5; <i>find and read articles over break</i>
<b>Week 5</b>			
10/10	M	<b>FALL BREAK</b>	
10/12	W	Measurement: Validity & Reliability	Schweigert, pp. 207-208; Morling Ch. 5 <b>(M)</b> ; <b>HW 2: Article Summaries due today</b> ; <i>bring articles to class (electronic is fine).</i>
<b>Week 6</b>			
10/17	M	Experimental Design & Threats to Validity	Schweigert, Ch. 6
10/19	W	Exam 1 Review	
<b>Week 7</b>			
10/24	M	<b>Exam 1</b>	<b>Mid-Course Assessment (after exam)</b>
10/26	W	Factorial Designs and Correlational Studies I	Schweigert, Ch. 9
<b>Week 8</b>			
10/31	M	Factorial Designs and Correlational Studies II	Schweigert, Ch. 9; Watch Qualtrics Videos <b>(M)</b>

11/2	W	Surveys and Interviews	Schweigert, Ch. 11
<b>Week 9</b>			
11/7	M	<b>Group Catch-Up Day</b>	<b>Bring finalized study materials to class;</b> <i>Meet with group during class time to finish developing surveys and begin data collection</i>
11/9	W	Looking Forward: Conducting Psychological Research & The Final Report	APA Manual CH 2; Revisit Uhlmann & Cohen (2005) <b>(M)</b>
<b>Week 10</b>			
11/14	M	Within-Subjects Design	Schweigert, Ch. 7
11/16	W	Quasi Experimental Design	Schweigert, Ch. 8; <b>HW 3: Draft of Introduction due</b>
<b>Week 11</b>			
11/21	M	Observational Studies and Field Experiments	Schweigert, Ch. 10 <i>Data Collection should be completed by 11/28</i>
11/23	W	<b>THANKSGIVING BREAK</b>	
<b>Week 12</b>			
11/28	M	Data analysis I	Warner Ch. 13 <b>(M)</b> ; APA Manual 4.41-4.44; APA Manual 5.20-5.25
11/30	W	Data analysis II	<b>Bring all R scripts to class.</b>
<b>Week 13</b>			
12/5	M	Science & Society: Discussing Critical Issues	Cherry (1995) Ch. 2 & Ch. 6 <b>(M)</b> ; <i>time to work on method/results.</i>
12/7	W	Course Wrap-Up	<b>HW 4: Draft of method/results section due</b>
<b>Week 14</b>			
12/12	M	Exam 2 review day	<b>Extra Credit</b> Participant pool participation (or article summaries) due today.
12/14	W	<b>Exam 2</b>	
<b>Week 16</b>			
12/22		<b>Final Research Paper due @ 12 NOON on Moodle</b>	

\*Schedule subject to change.