

Psyc 121: Methods & Statistics in Psychological Research

Spring 2014 Syllabus

Part 1: Course Information

Instructor Information

Instructor: Dr. Sharon Furtak, Assistant Professor of Psychology

- M.S. & Ph.D. in Behavioral Neuroscience from Yale University
- B.A. in Psychology from the University of Massachusetts, Amherst
- My research interests focus on the neurobiology of emotional learning & memory.

Office: AMD 357A

Office Hours: Wednesdays 10am to 1pm

Office Telephone: 916-278-6666

E-mail: furtak@csus.edu

T.A.: Catrina Calub, graduate student, E-mail: catrinacalub@csus.edu

Course Description

Project-based experience of Psychology. Study of the scientific processes in research such as literature reviews; developing testable hypotheses; design; IRB review; data collection, analysis, and interpretation; critical analysis of studies; APA paper preparation; and issues in dissemination. Study of some advanced statistical processes such as factorial ANOVAs, planned and post hoc comparisons, and multiple regression. Study of statistical software programs used in the analysis of data. **Graded:** Graded Student. **Units:** 3.0. This course fulfills one of the requirements for the Methods area of the major.

Prerequisite: PSYC 101 with a grade of a C- or better

Textbook & Course Materials

Required Text: Available at Bookstore.

1. Schwartz, B.M., Landrum, R.E., & Gurung, R.A.R. (2014) *An Easy Guide to APA Style* (2nd ed.). Los Angeles, CA: SAGE.
2. Wagner, W.E. (2013) *Using IBM SPSS Statistics for Research Methods and Social Science Statistics* (4th ed.). Los Angeles, CA: SAGE.
3. *Before you attend class* print out/download the syllabus and handouts from SacCT. Material will be posted regularly. **NO RECORDING OR PHOTOGRAPHY IN CLASS EXCEPT WITH THE EXPLICIT PERMISSION OF DR. FURTAK.**

Strongly Recommended: Available online at: www.onthehub.com/spss

4. *SPSS*, statistical software used throughout the semester, a student version of the "Base Package" can be purchased for \$40.00.

Course Requirements

- Internet connection (DSL, LAN, or cable connection desirable)
- Access to SacCT
- Access to SPSS & Microsoft Office (available in campus computer lab)

Course Structure

This course consists of two class sessions per week on Tuesday and Thursdays from 9:00am to 10:15am. Class time will be divided between activities that: 1) review methods and statistical concepts from Psyc 8 and Psyc 101 [noted as "Methods" in the schedule], 2) enter, recode and conduct statistical analyses on data sets in SPSS [noted as "SPSS" in the schedule], and 3) detail how to write a full length APA style, scientifically structured manuscript [noted as "Science Writing" in the schedule]. It is expected that significant time (~6.5 hours per week) outside of class will be dedicated to: a) conducting analyses in SPSS (either in the computer lab on campus or at home if you purchase the student version of SPSS), b) completing homework assignments and c) preparing APA papers.

SacCT Access

This course will have readings, assignments and materials posted online through a course management system named SacCT. You will use your SacLink account to login to the course from the [SacCT login page](https://sacct.csus.edu/) (<https://sacct.csus.edu/>). In SacCT, you will access online lessons, course materials, and resources.

To access this course on SacCT you will need access to the Internet and a supported Web browser (Internet Explorer, Firefox, Safari). To ensure that you are using a supported browser and have required plug-ins please run the [Check Browser](#) from your SacCT course. Refer to the SacCT Browser Tune-up page for instructions.

Technical Assistance

If you need technical assistance at any time during the course or to report a problem with SacCT you can:

- Visit the SacCT [Student Resources Page](#)
- Review SacCT [Student Tutorials](#)
- Visit the SacCT [Student FAQ's Web Page](#)
- Submit a [SacCT Problem Form](#)

Important Note: This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check SacCT for corrections or updates to the syllabus. Any changes will be clearly noted in course announcement or through SacCT email.

Psyc 121: Methods & Statistics in Psychological Research

Spring 2014 Syllabus

Part 2: Course Objectives

At the conclusion of the course, the goal is to have a clear understanding of how to conduct, analyze and write scientific research within the field of Psychology. As demonstrated by the ability:

- i) to read and understand scientific literature,
- ii) to ask hypothetical questions,
- iii) to design studies making the conceptual hypotheses concrete,
- iv) to translate the operational definitions into numbers,
- v) to analyze data using SPSS,
- vi) to write APA style papers, and
- vii) to discuss and disseminate science in a meaningful way.

Psyc 121: Methods & Statistics in Psychological Research Spring 2014 Syllabus

Part 3: Topic Outline/Schedule

Important Note: This syllabus and due dates of assignments is subject to change. It is the student's responsibility to check for and keep up with changes in due dates announced on SacCT. Assignment details will be explained in detail within each assignment posted on SacCT. If you have any questions, please contact Dr. Furtak.

Lecture & Assignment Schedule			
<i>Date</i>	<i>Week</i>	<i>Lecture Number</i>	<i>Topics & Assignments</i>
Tu, Jan. 28	1	1	<i>Introduction:</i> Overview of the Syllabus & Course Structure. <i>Methods I:</i> Ethics in Human & Animal Research. READING: Syllabus Spring 2014 & BlackBoard Assignment 1 (BB.1)
Th, Jan. 30		2	<i>Methods II:</i> Choosing a Research Question, Forming a Hypothesis, and Creating a Survey. <i>Science Writing I:</i> Conducting Literature Searches. HMWK #1: (due Thur, Jan 30th 11:59pm) Submit 100 word essay on research ethics from the BB.1 readings.
Tu, Feb. 4	2	3	<i>Science Writing II:</i> What is APA format? How to Write the Introduction Section of an APA Formatted Paper. READING: Schwartz Ch. 1-3 HMWK #2: (due Tues, Feb 4th 11:59pm) Submit a survey question that measures the decided on topic with a 5 point scale.
Th, Feb. 6		4	<i>SPSS I:</i> Data Collection & Basic Introduction to SPSS. READING: Wagner Ch. 1-3 HMWK #3: (due Thurs, Feb 6th 11:59pm) Submit 3 references relevant to the survey, for each include: Author(s), Title, Journal Citation, & a synopsis of the article.
Tu, Feb. 11	3	5	<i>Science Writing III:</i> Literature Searches Revisited. READING: Schwartz Ch. 4-7 HMWK #4: (due Tues, Feb 11th at 11:59pm) Submit survey data in Excel format.
Th, Feb. 13		6	<i>SPSS II:</i> Entering & Getting to Know Your Data in SPSS. READING: Wagner Ch. 4 HMWK #5: (due Sat, Feb 15th 11:59pm) Submit draft of Introduction section, including 5 references, for Paper 1.

<i>Date</i>	<i>Week</i>	<i>Lecture Number</i>	<i>Topics & Assignments</i>
Tu, Feb. 18	4	7	<i>Science Writing IV</i> : How to Write the Methods Section of an APA Formatted Paper. READING : Schwartz Ch. 8
Th, Feb. 20		8	<i>Methods III</i> : Review of Bivariate Correlation. <i>SPSS III</i> : Conducting Correlations in SPSS. READING : Wagner Ch. 7 HMWK #6: (due Sat, Feb 22nd 11:59pm) Submit draft of your Methods section Paper 1.
Tu, Feb. 25	5	9	<i>Methods IV</i> : Review of Simple Linear & Multiple Regression. <i>SPSS IV</i> : Conducting Regression in SPSS. READING : Wagner Ch. 8; BlackBoard Assignment 2 (BB.2) HMWK #7: (due Tue, Feb 25th 11:59pm) Submit results from lecture 8, SPSS printout in a PDF format.
Th, Feb. 27		10	<i>Science Writing V</i> : How to Write the Results Section of an APA Formatted Paper. READING : Schwartz Ch. 9, 11 & 13 HMWK #8: (due Thur, Feb 27th 11:59pm) Submit results from lecture 9, SPSS printout in a PDF format.
Tu, Mar. 4	6	11	<i>SPSS V</i> : Understanding your correlation and regression results. HMWK #9: (bring printed copy to class Tues, Mar 4th) Draft results of correlation and regression.
Th, Mar. 6		12	<i>Science Writing VI</i> : How to Write the Discussion Section of an APA Formatted Paper. HMWK #10: (due Thurs, Mar 6th 11:59pm) Submit draft of your Results section of Paper 1.
Tu, Mar. 11	7	13	Science Writing: 30 minutes OPEN QUESTION & ANSWER DAY SPSS: 45 minutes OPEN QUESTION & ANSWER DAY HMWK #11: (due Thurs, Mar 11th 11:59pm) Submit draft of your Discussion section of Paper 1.
Th, Mar. 13		14	<i>SPSS VI</i> : Graphing Your Results and Exporting Figures. READING : Wagner Ch. 5 & 11
Tu, Mar. 18	8	15	<i>Science Writing VI</i> : Literature Citations and Reference Lists. READING : Schwartz Ch. 10, 12, 14
Th, Mar. 20		16	<i>Methods V</i> : How to Prepare Poster & Talk Presentations. READING : BlackBoard Assignment 2 (BB.3) Paper #1 due Thur, Mar 20th 11:59pm : Submit Final Paper 1.

<i>Date</i>	<i>Week</i>	<i>Lecture Number</i>	<i>Title, Assignments & Exams</i>
Tu, Mar. 25	9	Spring Break Enjoy!	
Th, Mar. 27		Spring Break Enjoy!	
Tu, Apr. 1	10	17	<i>Methods VI:</i> Discussing Observational Studies & Choosing a Research Question. <i>Science Writing VII:</i> Revisiting the Introduction Section.
Th, Apr. 3		18	Oral Presentations Group 1 Number 1 on Paper 1. Group 1 Number 1: (due Tues, Apr. 1st 11:59pm) Submit presentation on SacCT for feedback. HMWK #12: (due Thur, Apr 3rd 11:59pm) Submit observational data in Excel format.
Tu, Apr. 8	11	19	<i>SPSS VII:</i> Data Entry for Observational Data in SPSS. HMWK #13: (due Tues, Apr 8th 11:59pm) Submit 3 references relevant to the observational study, for each include: Author(s), Title, Journal Citation, & a synopsis of the article.
Th, Apr. 10		20	Oral Presentations Group 1 Number 2 on Paper 1. Group 1 Number 2: (due Tues, Apr. 8th 11:59pm) Submit presentation on SacCT for feedback.
Tu, Apr. 15	12	21	<i>Methods VII:</i> Independent-, Paired- and One-Sample T Tests. <i>SPSS VIII:</i> Conducting T Tests in SPSS. READING: Wagner Ch. 9
Th, Apr. 17		22	<i>Methods VIII:</i> One-Way ANOVA Designs. <i>SPSS IX:</i> One-Way ANOVAS in SPSS. READING: Wagner Ch. 10 HMWK #14: (due Thur, Apr 17th 11:59pm) Submit results from lecture 21, SPSS printout in a PDF format
Tu, Apr. 22	13	23	<i>Methods IX:</i> Two-Way ANOVA Designs. <i>SPSS X:</i> Two-Way ANOVAS in SPSS. HMWK #15: (due Tues, Apr 22nd 11:59pm) Submit results from lecture 22, SPSS printout in a PDF format
Th, Apr. 24		24	OPEN DAY FOR SPSS ANALYSES

<i>Date</i>	<i>Week</i>	<i>Lecture Number</i>	<i>Title, Assignments & Exams</i>
Tu, Apr. 29	14	25	<p><i>Methods X</i>: Post-Hoc Contrasts in ANOVAs.</p> <p><i>SPSS XI</i>: Conducting Post-Hoc Analyses in SPSS.</p> <p>READING: BlackBoard Assignment 4 (BB.4)</p> <p>HMWK #16: (due Tues, Apr 29th 11:59pm) Submit results from lecture 23, SPSS printout in a PDF format.</p>
Th, May 1		26	<p><i>Science Writing VII</i>: Revisiting the Methods & Results sections.</p>
Tu, May 6	15	27	<p><i>SPSS XII</i>: Making your Table and Figures.</p> <p>HMWK #17: (due Sat, May 6th 11:59pm) Submit results from lecture 25, SPSS printout in a PDF format.</p>
Th, May 8		28	<p><i>Science Writing VII</i>: Revisiting the Discussion Section.</p>
Tu, May 13	16	29	<p><i>SPSS XIII</i>: Finishing up your analyzes and figures in SPSS.</p> <p>READING: BlackBoard Assignment 5 (BB.5)</p>
Th, May 15		30	<p>Oral Presentations Group 2 Number 1 on Paper 2.</p> <p>Group 1 Number 2: (due Tues, May 13th 11:59pm) Submit presentation on SacCT for feedback</p> <p>Paper #2 due Thurs. May 15th at 11:59pm.</p>

Psyc 121: Methods & Statistics in Psychological Research

Spring 2014 Syllabus

Part 4: Grading Policy

Graded Course Activities

Visit the **Assignments** link in SacCT for details about each assignment listed below. (See Part 1 for more information about accessing tools and activities).

Points	Description
60 (30 pt Each)	1. <i>Papers</i> . There will be 2 APA style research papers over the semester. Each paper will be limited to 12 pages in length. The details for each paper assignment and grading rubric will be posted on Blackboard. Each paper is worth 30 points of your final grade for a total of 60 points.
30	2. <i>Homework</i> . 17 homework assignments based on data collection, SPSS analysis, draft paper sections and essays will be given over the semester. The lowest 2 grades will be dropped. Of the other 15 homework assignments, each assignment is worth 2 point of your final grade for a total of 30 points.
10	3. <i>Group Oral Presentation</i> . Two students will be assigned to a group. Both students will present together to the class and each group member must present half of the presentation (Introduction, Methods, Results, Discussion). Presentations must be between 7-10 minutes in length. Groups will be assigned to <i>either</i> paper 1 or paper 2. Group assignments will be listed under Oral Presentations on SacCT. You will be required to turn in your PowerPoint slides via email to: furtak@csus.edu <i>at least 72 hour</i> before your presentation. The oral presentation is worth 10 points of your final grade
---	4. <i>Class Attendance</i> . Five absences, <u>including excused or unexcused</u> , is accepted prior to a grade reduction. There is a 1-point decrease in your final grade for each additional day missed for up to 5 days (5 points). Regular attendance is advised. Tardiness of more than 15 minutes after the beginning of class will count as an absence.
100	Total Points Possible

Late Work Policy

Late submissions will be penalized by 5 points for every day they are late. The penalty will go into effect 15 minutes after the posted due date and time.

Be sure to pay close attention to deadlines.

Viewing Grades in SacCT

Points you receive for graded activities will be posted to the SacCT Grade Book typically within 7 days for homework assignments and typically within 14 days for papers after submission. Click on the My Grades link on the left navigation to view your points.

It is your responsibility to check these grades once posted. If you have a question or complaint about a grade posted on SacCT, then you must email Dr. Furtak within 7 days of the posted grade. In the email, please put in subject line "question regarding grade" and within the email make sure to state which assignment you are referring to and exactly where you believe a grading error was made.

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

Letter Grade	Percentage	Performance
A	93-100%	Excellent Work
A-	90-92.99%	Nearly Excellent Work
B+	87-89.99%	Very Good Work
B	83-86.99%	Good Work
B-	80-82.99%	Mostly Good Work
C+	77-79.99%	Above Average Work
C	73-76.99%	Average Work
C-	70-72.99%	Mostly Average Work
D+	67-69.99%	Below Average Work
D	60-66%	Poor Work
F	0-59.99%	Failing Work

Important note: For more information about grading at Sac State, visit the academic policies and grading section of the university catalog.

Psyc 121: Methods & Statistics in Psychological Research Spring 2014 Syllabus

Syllabus

Part 5: Course Policies

Participation

Students are expected to participate in all classroom activities as listed on the course calendar. Please see Part 4 for grading relative to attendance and participation.

Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let Dr. Furtak, or the T.A. Ms. Calub, know as early as possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing Dr. Furtak, or Ms. Calub, when difficulties arise during the semester so that we can help you find a solution.

Complete Assignments

All assignments for this course will be submitted electronically through SacCT unless otherwise instructed. Assignments must be submitted by the given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme circumstances.

Understand When You May Drop This Course

It is the student's responsibility to understand when they need to consider disenrolling from a course. Refer to the Sac State Course Schedule for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if there is a documented medical reason. All incomplete course assignments must be completed within 1 year.

Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the [Office of Services to Students with Disabilities](#) (SSWD), and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to SSWD and meet with a SSWD counselor to request special accommodation *before* classes start.

SSWD is located in Lassen Hall 1008 and can be contacted by phone at (916) 278-6955 (Voice) (916) 278-7239 (TDD only) or via email at sswd@csus.edu.

Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

Sac State's Academic Honesty Policy & Procedures

"The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University, Sacramento expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades."

Read more about Sac State's [Academic Honesty Policy & Procedures](#)

Definitions

At Sac State, "**cheating** is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means."

"**Plagiarism** is a form of cheating. At Sac State, "plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person's contribution."

Source: Sacramento State University Library

Important Note: Any form of academic dishonesty, including cheating and plagiarism, may be reported to the office of student affairs.

Course policies are subject to change. It is the student's responsibility to check SacCT for corrections or updates to the syllabus. Any changes will be posted in SacCT.