

**PSYCH 100**  
**Introduction to Research Methods**  
**SYLLABUS**

**Aims and Goals**

The aim of this course is to teach you about research methods in Psychology. We hope you will become an expert consumer of psychological research and a good producer of information. We also hope that you will experience the joy of conducting good research.

We have some specific goals for the course. You must master the basics of APA style. You will learn about observational studies, knowing what they are and how to conduct them. You will learn about surveys, becoming sophisticated about sampling and instrumentation, by conducting one. You will learn about experiments, becoming knowledgeable about design, implementation, and analysis – and again you will learn through doing.

More generally, it is important to know which arguments can be settled by empirical evidence and which cannot. One goal of the course is for you to gain a true appreciation of the uses (and the limitations) of empirical evidence for the inferences we draw and the conclusions we reach.

Learning as much as you can in this course will help you in every other psychology course that you take. If you are well trained about research, the instructors of later courses will be happy and you will need to do less remedial work. The more you understand about what makes research solid or not, the better help you can be to other students in other classes. Your mastery of APA style will help you communicate ideas.

Learning as much as you can in this course will also help you in life. Everyday life is filled with references to research. How many times have you seen someone on T.V. or in a newspaper say “studies show...”? Probably a lot. By the end of the course, you will be able to judge the value of the information presented in many public discussions.

**Preliminary Notes of Caution**

We care about precision. It is not enough for you to gain a vague or general idea about research. We want you to acquire a great deal of specific knowledge and to develop a number of specific skills. That is why we have a weeding-out exam early in the course. If you fail either of the first two quizzes, you fail the course. The taxpayers of California are subsidizing your education (as are your professors), and we have room only for those who are willing to devote

the effort to learning with precision. Overcrowding at UCSC results not only from tight budgets; it also arises when students grab seats in classes where they cannot or will not do the work to the appropriate level. In your lab on Wed, **July 29** you will take Quiz 1 (on the syllabus). Then on **Thurs July 30**, you will take Quiz 2 (APA style) in class. **If you obtain a score of 13 or lower on either exam you will receive an F in the course.** Because some people might have test anxiety or might be ill one day, we will have a special “make up” exam. If you think that you failed either the syllabus quiz or the APA quiz, you can come to the Cowell College Provost’s house on Friday, July 31 at 8 AM and take a last-chance make-up. Again, a score of 13 or lower means you will fail the course. Please be mindful of the date for dropping the class without penalty. At the time of this printing, that date was set for Aug 3

To help you learn APA and pass the ghkkkk APA quiz handily, I have commissioned some videos. Please consult them as soon and as often as you wish. Students report that these videos help a lot. They contain some of the same information, just presented in different formats. Please consult:

[http://www.youtube.com/playlist?list=PLweBMLPEQgQ3tMXJmCuA\\_om0St-KX5ldI](http://www.youtube.com/playlist?list=PLweBMLPEQgQ3tMXJmCuA_om0St-KX5ldI)

<http://www.youtube.com/watch?v=DS8R6dS11FQ>

Over the years, many minds have bent themselves to the task of designing an engaging course. We have arranged materials in a way that makes the acquisition of all the concepts easy. The point is for you to learn, not to suffer. For some mysterious reason, Psych 100 has a reputation of being difficult. In fact, if you attend class (lectures and labs) and do the assigned reading and the assigned group projects, the course should be fairly easy – even in the rush of a 5-week summer course. The work is time-consuming, and there is no way to condense an hour of observations into 10 minutes. But, while being time-consuming the work is not difficult. Note please that the reading is light for the course, but it is essential. Also, the group work is essential.

Please expect to spend 31 hours per week on the course – 10 hours in class (7 for lecture; 3 for lab) and 21 hours outside of class.

If you fall behind, the work can become very difficult. What you learn in week 3 depends on what you learn in week 2, which in turn builds on what you learn in week 1. Those who slack off early in the course may be lost. This is another reason for the weeding-out exam. Because a firm foundation is needed, we spend a lot of time at the outset on issues of operationalization. That means that later in the course the surveys and experiments are done in quick order. If you want to minimize your stress, look ahead and think about what topics are of interest for your survey or your experiment. GJJJ

At your second lab meeting, you will form groups and determine a topic that might be the theme of your work throughout the course. This theme could be the basis of your SOS, your

survey, and your experiment. You might, for example, research sex differences. Or you might look at mood variations or cognitive styles. Whatever you select will need to be able to be studied without asking participants any questions (through systematic observation), studied by asking participants questions (through a survey), and studied in an experiment. As soon as possible, you should start reading journal articles on your topic.

Teaching you the methods of psychological research is like teaching you how to drive a car. Passively sitting in a lecture hall and listening to someone lecture about how to drive a car will not actually make you the kind of driver we want on the highway. In the same way, listening to the instructor lecture about “confounds” will not teach you about confounds to the same degree as having you engage in empirical projects. This version of Psych 100 is very hands-on. You will spend less time reading and less time listening to lectures in this course than in most courses, but you will spend more time doing projects. If you think about what you are doing in the course, the concepts and the knowledge you acquire will generalize beyond this course. So, please, think while you do.

You will be working in groups, usually of 4 students for each of the three empirical projects (systematic observational study; survey; experiment). Knowing that students often have non-overlapping schedules, we have set aside class time for some of your group meetings. Overall, two-thirds of your grade will be determined by your work in groups. Two of the three papers are written in groups. One is an individually-written paper reporting on group work.

Attendance. If you miss more than 60 minutes of section in the summer, without a medical excuse or other valid excuse, you will fail the course. You must also attend the lecture slots set aside for group work. If you miss more than one of these without a valid excuse, you will obtain no better than a C in the class. Please note that we also grade your participation in sections. It is not enough to come and sleep during the lab.

Please note that minor adjustments in the syllabus may be made during the course of the term. Announcements of small changes and clarifications may be made at the beginning of class. If you miss class or are late, it is your responsibility to find out from your fellow students what you missed in terms of announcements and also in terms of content. Also, please check your UCSC email daily as I send out a lot of email notes to the class.

Also note that plagiarism and other forms of cheating are not tolerated. If the evidence convinces me that you have cheated on a quiz or have plagiarized in a paper, I will give you a failing grade. We distinguish between cooperative papers (working in teams; sharing data) and plagiarized papers. If you have any questions or doubts about whether or not you are plagiarizing, please consult with your TA. Xx As a rule of thumb, more than 5 words in a row taken from some other source (even a web site) need to be in quotation marks, and the references needs citation. Or if information is presented that you found in a reference you should cite that reference even if you do not use a direct quote. quuux

## Graded Assignments and Calculating Your Grade

Altogether there are 1000 points that can be earned in the class. We then translate the points into grades for those who are getting a grade in the course. The translation is as follows:

Points and Grades	Points and Grades	Points and Grades
1000-996 = A+	869-831 = B	729-601 = D
994-931 = A	829-801 = B-	599 – 0 = F
929-901= A-	799-771 = C+	
899-871 = B+	769-731 = C	

If you are taking the course **PASS-FAIL**: 731 and above is passing; 729 and below is failing.

For each of the three papers, you need to have: a cover page, an abstract; an introduction that includes information from three separate articles and is at least four paragraphs long; a complete methods section; a complete results section; a complete discussion section; references; whatever tables, figures, and appendices your TA requires. The work for all three papers will be done in a team of about 4 people. The first paper (reporting on your systematic observational study) and the third paper (on your experiment) will be written as a team – one paper per team. The surveys will be written individually. Thus, for the survey paper, you will find the articles together, construct the instruction together, analyze the data together, and then have individual write-ups of the paper. It is okay to have the method and results sections of the survey paper look very similar, but the introduction and the discussion sections cannot.

Please note one aspect of the writing of your three papers: the literature searches. Be sure to use referred journals as the source of your information. A referred journal is one in which the articles are accepted for print after a rigorous process in which peers of the author (i.e., other researchers) look over the work and critique it. All APA journals are referred.

<b>Assignment</b>	<b>Total Points</b>	<b>Points per individual assignment</b>
Quizzes	200	20 points per quiz
SOS research report	160	
Survey research report	210	
Experiment research report	260	
Participation in Section	100	20 points per section: 10 pts for showing up; 10 more for staying alert and participating
Research O Rama	15	Points for participating in 8 experiments during ROR
Group member evaluations	10	

Cumulative Exam	45	This exam covers material from the entire course
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## **The Inherent Problem of Group Work**

Over the years, we have found that most groups work extremely well together. About 90- 95% of the groups have no major problems. But, for the small minority, problems arise. The ambitious, engaged student can feel frustrated if her or his grade is lowered by sloppy work from teammates. The TAs and IAs, not to mention the students themselves, feel offended when a lazy student rides on the coattails of her or his teammates to getting a high grade.

As time has gone by, we have tried to decrease the problem of free-riding. No solution is perfect. But we now require that the survey paper be written individually. Students who are just humming along are usually outed by the survey paper. If you feel that one team member is not pulling his or her weight, then tell your IA and your TA and that person's section grade will be adjusted.

We will collect your term-long evaluations of your teammates during the last day of class – 8/27. If you are not present on the last day of class, then you give up the right to evaluate others.

## **Reading and Workbooks**

### Publication Manual of the American Psychological Association, 6<sup>th</sup> edition

You are required to use the 6<sup>th</sup> edition of the American Psychological Association (APA) manual of style. The APA manual is available for purchase at the Bay Tree Book Store. Copies are in McHenry Library for reference. You can also order it online from the American Psychological Association (APA). If purchasing the Manual is a financial hardship, please see the instructor. Please avoid the first printing of the 6<sup>th</sup> edition, as it contained mistakes.

### Workbooks

Workbooks include the following: copies of power point lectures with spaces for lecture notes, links to the readings (besides the APA manual), a glossary of terms, example quiz questions for studying and numerous handouts and worksheets to use in your research projects. Workbooks are available for purchase from the instructor on 7/27. If purchasing the workbook is a hardship, please tell me. If you cannot afford full price, then you will pay part of the price or get the book for free. You must bring the workbook (or relevant portions) to every lecture and lab. No computers allowed in lecture, but sometimes you will need a calculator. Please *do* bring laptops to section.

One article appears in the workbook (fair use) and others can be obtained by following the links. You may be quizzed on the readings although perhaps not until the cumulative exam. Please read the work by the due date.

## **Disability Accommodations**

If you qualify for classroom accommodations because of a disability, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me as soon as possible, preferably within the first week of the Summer Session. Contact DRC by phone at [831-459-2089](tel:831-459-2089) or by email at [drc@ucsc.edu](mailto:drc@ucsc.edu) for more information.

## **The Teaching Team**

The teaching of Psych 100 requires a big team effort. Each lab section of 25 – 35 students has a Teaching Assistant (TA), aided by about 3 IAs. They will also assist you on your three empirical research projects. They are an invaluable resource.

Both the TAs and the IAs are here to help you. **READ THEIR EMAILS PROMPTLY AND THOROUGHLY.** If there is anything you don't understand, call on your IA ASAP.

Your TA and IA will devise the schedule for feedback on preliminary drafts of your papers. In the past, students who got feedback on their preliminary drafts tended to do much better in the course than other students. In a 10-week term, quick turn around is important. Each TA and IA duo will let you know the schedule for drafts for each of the three major assignments. Please be considerate of TA and IA time. Allow time for replies. And, of course: read those darn emails carefully as well as quickly. The compressed schedule of the summer means that we must all stick strictly to deadlines.

Although much (e.g., grading) is lock-step in the course, there is some variation in how the sections operate. Some TAs like to assign homework that is graded; others prefer ungraded assignments; still others have no little markers on the way to the big projects. Each TA sets up an individual schedule for feedback. TAs differ as to which point during the term they take their sections to the statistics lab. Each TA and each IA has an individual style. Do not grumble about variation; but do, please, focus on the unique good qualities of your TA and your IA.

## **Office Hours**

My open office hours are Tues and Thursdays 7:30 AM to 8:30 AM in our classroom. My email address is: [fjrosby@ucsc.edu](mailto:fjrosby@ucsc.edu). I receive 50 to 150 emails daily; so be patient about replies please. But if a week goes by, contact me again.

## **Extra Credit**

We have a couple of opportunities to earn extra credit. Alas, I do not think that we have enough opportunities for everyone. So, sign up early for one of the opportunities. If you sign up, you are responsible for showing up. If you find that you cannot show up, you must notify me early or you will be docked some points from your final grade. We will keep waiting lists.

You can earn 10 points by coming to a special session at the Cowell Provost’s house, Monday **August 10 9 AM – noon**. You will work with 14 other students and a special instructor on a large piece of art. You will write a 1 or 2 page essay that addresses the question: Can we use the empirical method to determine what should be counted as “beautiful” or is beauty subjective?

You can earn 10 points by coming to a special session at the Cowell Provost’s house, Monday **August 10 2 – 5 PM**. You will work with 14 other students and a special instructor on a large piece of art. You will write a 1 or 2 page essay that addresses the question: Can we use the empirical method to determine what should be counted as “beautiful” or is beauty subjective?

We may also schedule a trip to LA. If you come on that trip, you can earn up to 50 extra points. More details when I have them.

## **Schedule of Lectures and Lab Meetings**

Please note that the labs all occur between the Monday and Wednesday lectures. Labs are essential to the course. Attendance at the lab sections is required.

Bring your workbook to every lecture and lab. Bring calculators for some (best to have them on hand). No open computers are allowed in lectures, unless I specify otherwise. Laptops are, however, to be brought to all labs. Below you can see the entire term laid out for you in a grid. Lecture topics are *in italics*. Times when you need to be present for group work are marked with an asterisk.

TUES CLASS 9 – 12:30	Wed LAB	THURSDAY CLASS 9 – 12:30
7/28 <i>L: overview</i> <i>L: mechanics of the course</i> <i>L: APA style</i>	7/29 Q1: syllabus Form groups How to find articles online Topics for SOS Review APA style	7/30 Q2: APA style Q3: overview <i>L: operationalization</i> <i>L: quant and qual</i> <i>L: data analysis</i> <i>Mini-L: SOS; reliability</i>
8/4	8/5	8/6

<p>Q 4: operationalization *work in groups to articulate and test your operational measures for the SOS try to establish reliability</p>	<p>collect your data—once reliability is established, do this individually</p>	<p>bring your data to class. also bring calculators <i>L: chi square</i> <i>L: good writing</i> <i>L: sampling for surveys</i></p>
<p>8/11 paper 1 is due Q5: chi square <i>L: instrument construction parts one and two</i> select survey design and topics</p>	<p>8/12  Q6: surveys Construct your surveys, knowing exactly how to score. Get sign off from TA</p>	<p>8/13  survey swap <i>L: Pearson's r or t-test</i>  calculate scores, conduct statistical tests</p>
<p>8/18 paper 2 (individually written) is due  <i>L: experimental design IVs and DVs,</i> <i>L: implementing experiments</i> <i>L; main and interaction effects</i></p>	<p>8/19  Q7: IV and DV Q8: main and interaction  Design experiment: determine your manipulation and your measures</p>	<p>8/20  draft of intro due.  <i>L: field and quasi experiments</i> <i>L: ethics</i></p>
<p>8/25  RESEARCH-O-RAMA</p>	<p>8/26  write up experimental methods, results – get sign off start discussion section</p>	<p>8/27  paper 3 is due Q9: field and quasi Q10: ethics Evaluations  Cumulative exam  Short celebration  Small surprise</p>