**Experimental Research Methods (PSYC 314L)**Spring 2020

Lecture Location: GFS 118

Days and Time: Monday & Wednesday @8:30-9:50 a.m.

Lab Location: KOH 208

Lab Times: Thursday @ 10:00-11:50 a.m. or Friday @ 2:00-3:50 p.m.

Course website at http://blackboard.usc.edu

**Instructor**

Dr. Şule Güney, sguney@usc.edu

Office location: SGM 630

In-person office hours: By appointment

Online office hours: TBD

**Teaching Assistant**Jackson Trager, jackptrager@gmail.com
Office location: HNB B27
Office hours: Wednesday @3:00-5:00 p.m.

**Course Objectives**

Psychology is the scientific study of the human mind and behavior, and themajority of the psychological inquiry uses experimental methods. This course will introduceyou to the design of experimental research, that is, designs with manipulation oftreatments or random assignment. The primary goal is for you to learn fundamentals ofexperimental research design and statistical analysis of quantitative data. You will design and conduct an experimental study to address psychological questions and develop a professional presentation of your findings. You will develop skills that are essential in psychology and related professions.

**Required Materials**
Goodwin, C. J., & Goodwin, K. A. (2017). *Research in psychology: Methods and design
 (8th Ed.).* Hoboken, NJ: John Wiley & Sons.

Supplemental readings will be provided through Blackboard.

**Grading Breakdown**Grades for this course are based on five major components. Each of these will be assessed separately and posted in the Blackboard gradebook on the basis of 100 points.

Breakdown of your final total course grade is as follows:

Exam I 20%

Exam II 20%

Research Project Report 30%

Research Project Presentation & Attendance 15%

Lab assignments 15%

Total 100%

In percentages, your letter grade will be assigned as follows:

A: 93 (and above) A–: 90-92

B+: 87-89 B: 83-86 B–: 80-82

C+: 77-79 C: 73-76 C–: 70-72

D+: 67-69 D: 63-66 D–: 60-62

F: 59 (and below)

**Exams**

Two exams will be given during the semester. The exams will test your understanding of the major concepts in the course. All exams are based on a combination of textbook material, lecture material, lab discussions, and assignments. The exams will consist of multiple-choice questions and short answer questions, and they are non-cumulative. Please see the course schedule below for the exam dates. There will be a short review session before each exam.

**Research project report**

You will conduct your own experimental study in this course. You will propose a research question, review the relevant literature, design your study, collect and analyze your data in accordance with your design, and write a final report including a discussion of your findings. Therefore, the final report will be a demonstration of your ability to apply your knowledge to a real experimental study. You will work in groups of **two** to conduct and present the study during the semester, but you will write the final report **individually**. Note that this report is 30% of your grade, so please pick someone with whom you can effectively work with as a research partner, be diligent in writing your paper and get help from the instructor or TA immediately if you have any problems.

**Final research report should be uploaded to Blackboard by Monday, May 11th, 11:00 a.m. Late submissions will NOT be accepted. No exceptions.**

**Research project presentation and attendance**

You will present your research study during one of the last four lecture days with your partner. Presentations will be in a conference format and should be professional. You may be as creative as you want to be in presenting your study. Attendance for all students is mandatory during those presentation lectures. Your presentation should be saved in *Power Point format* (.ppt) and sent to Dr. Güney (sguney@usc.edu) by *11:59pm on the day before your presentation day.*

**Lab assignments**

The lab assignments are specifically designed for you to acquire the necessary skills, knowledge, and tools to complete your final research report. Labs are also designed for you to acquire, at a minimum, working knowledge of the different types of methods that psychologists use. You will also learn the basics of statistical software (i.e., SPSS); and how to run certain analyses, read output, etc. Each lab assignment is typically due by the beginning of the following week’s lab. Late submissions without a medical excuse will result in 20 points (out of 100) penalty each day you are late.*Assignments that are submitted 3 days later than the due date will automatically receive zero with no exceptions.*

**Course and University Policies**

1. Course Participation & Lecture attendance: This course is challenging and attendance is expected of all students. It is especially important that you be on time for class, have completed your reading assignments *prior* to class, and that you are prepared for discussion of these materials in class. *Please note that lecture slides will be made available only to those who attend the lectures.*

2. Missed Exams and/or Assignments: Exams will be held in class on the date stated below. Assignments are due at the beginning of class or lab or on the predetermined due date and should be submitted electronically through Blackboard. Missed exams and assignments cannot be made up and will result in a grade of zero. If you miss an exam, you will need to provide original documentation of a serious, unforeseeable medical emergency from your physician within one week of your absence. USC athletes should meet with Dr. Güney by the end of the second week if their scheduled athletic events conflict with course requirements. If Dr. Güney decides to allow a make-up, the exam may consist of essay questions only.

3. Tardy Policy: Do NOT show up late to class or lab. Anyone who shows up 10 minutes or later to the class will not be allowed to come in. If you show up 10 minutes or later on an exam day, you will not be allowed to take the exam (with the exception of medical emergencies).

4. Cell Phone and Electronic Device Policy: This class has NO CELL PHONE policy. Cell phones should be turned off during class. Do NOT leave cell phones on vibrate and do NOT send text messages during class. Computers may be used for note taking purposes only. Any other usage (e.g., accessing Facebook, email, or gaming) in class is not permitted.

5. Assignment formatting: All assignments in this course are expected to be word-processed and completed using APA-style. Graphs/tables should be computer generated. Word processing and data management software (SPSS) is available in all computer labs on campus. Note that all students are expected to have access to the student computer network. It is your responsibility to ensure that your access is up-to-date during the semester.

6. Feedback: Dr. Güney and the TA will make every attempt to return exams and assignments no later than two weeks after the due date.

7. Academic Dishonesty: Plagiarism, lazy writing, and cheating are violations of the Student Judicial Affairs & Community Standards and may be dealt with by both the instructor and the university. Plagiarism is defined as, “the act of presenting the ideas and writings of another as one’s own.” Lazy writing is defined as, “using quotes or paragraphs with the proper citation, but are used in a manner that a paper is stitched together and clearly has little or no original writing.” Cheating is defined as, “the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means.” In instances of academic dishonesty, the instructor will take appropriate action as outlined in the Academic Integrity Review Process (SJACS 14.10). For more information on avoiding plagiarism or lazy writing, see Chapter 16 in Borden and Abbot (2010), Chapter 1 in the APA Publication Manual, or visit http://www.usc.edu/student-affairs/student- conduct/ug\_plag.htm.

8. Support for Student with Disabilities: If you are in need of an accommodation for a disability in order to participate in this class, please see the instructor and contact Disabilities Services and Program at (213) 740-0776.

9. University Escort Service: If you feel that you would like to be escorted to your vehicle, bus, or campus residence after 5:00 p.m., do not hesitate to call (213) 740-4911.

10. Learning Resource Center: Tutors are available for this course through the Learning Resource Center (LRC). If you should find that you are not doing as well in this course as you would like, please see Dr. Güney immediately. Dr. Güney and the TA will help you as best they can. You can also arrange short-term or long-term tutoring through the LRC. The Writing Center is also available to tutor students who are having difficulty with writing. For assistance, visit their website at http://college.usc.edu/writingcenter/ or call (213) 740-3691.

**Tentative course schedule\***

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| Week | Date | Topic | Readings | Labs |
| 1 | Jan 13Jan 15 | Overview of the course & requirementsPsychology and science | --Ch. 1 | No lab |
| 2 | Jan 20Jan 22 | No Class (MLK Day)Scientific method | ---Ch. 1 (p. 5-15); Ch. 3 | Lab 1:Database search & ID a topic of interest |
| 3 | Jan 27Jan 29 | Ethics in researchTypes of scientific claims: Frequency, Association and Causal claims | Ch. 2Supplied | Lab 2:Develop a hypothesis; form your groups |
| 4 | Feb 3Feb 5 | Conceptualization & OperationalizationMeasurement  | SuppliedCh. 4  | Lab 3:Summarize articles; start writing Introduction |
| 5 | Feb 10Feb 12 | SamplingHypothesis testing | Ch. 4 (cont’d)Ch. 4 (cont’d);Supplied | No Lab |
| 6 | Feb 17Feb 19 | No class (President’s Day)Essential features of experimental research | Ch. 5 | Lab 4:Basics of SPSS |
| 7 | Feb 24Feb 26 | Internal validity**EXAM I** | Ch. 5 (cont’d);Supplied-- | Lab 5:How to use Qualtrics |
| 8 | Mar 2Mar 4 | Between-subjects vs. Within-subjects designsDiscussion of research proposals  | Ch. 6 --- | Lab 6:Design your study & Find measures |
| 9 | Mar 9Mar 11 | Methodological controlBiases in experiments | Ch. 6 (cont’d)Ch. 6 (cont’d) | Open Lab:Get your study ready |
|  SPRING BREAK (MARCH 15-22) |  |
| 10 | Mar 23Mar 25 | Single-factor design ISingle-factor design II (Analysis) | Ch. 7 Ch. 7 (cont’d) | Open Lab:Start collecting your data |
| 11 | Mar 30Apr 1 | Factorial designs IFactorial designs II (Analysis) | Ch. 8 Ch. 8 (cont’d) | Lab 7: t-tests & One-way ANOVAs |
| 12 | Apr 6Apr 8 | Small *N* designsEvaluation research | Ch. 11 Ch. 11 (cont’d) | Lab 8: Factorial ANOVA |
| 13 | Apr 13Apr 15 | **EXAM II**APA format | --Appendix A | Lab 9:Analyze your data |
| 14 | Apr 20Apr 22 | Research presentations I (*attendance mandatory*)Research presentations II (*attendance mandatory*) | SuppliedSupplied | Lab 10: Write your Discussion |
| 15 | Apr 27Apr 29 | Research presentations III (*attendance mandatory*)Research presentations IV (*attendance mandatory*)  | SuppliedSupplied | No lab |

**\*Note:** The course may deviate from the syllabus from time to time as circumstances require; in such cases, an announcement will be made in class and on Blackboard.