Psychology 499: Special Study  
Spring 2015  
Fridays, 10:00AM-12:00PM  
N107 (SDSU-IV Calexico campus)

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Course Description

From the SDSU course catalog:

“Individual study, including library or laboratory research and a written report. Maximum credit six units. No more than nine units of Psychology 497 and 499 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major” (p. 400).

Psychology 499 is designed to provide you with first-hand experience with psychological research. As part of this course, you will participate in the several responsibilities that are involved in conducting research. Some of these responsibilities include running experiments, managing data, performing literature reviews, writing reports, and creating a research presentation. By the end of the semester, you will:

- Conduct standardized research  
- Understand ethical principles involved in proper research  
- Utilize computer programs to analyze data  
- Summarize extant literature pertinent to a research question  
- Find peer-reviewed psychology articles through appropriate search engines  
- Work with peers to develop a research presentation  
- Present yourself as a budding professional in psychology

Psychology 499 is designed to foster your ability to accomplish the following objectives that the Department of Psychology has for our psychology majors:

1. Characterize the nature of psychology as a scientific discipline and identify its primary objectives: to describe, understand, predict, and control behavior and mental processes.  
3.1 Formulate scientific questions using operational definitions.  
3.2 Generate appropriate methodological techniques for testing specific hypotheses.  
3.4 Identify the factors required to make causal inferences about relationships between variables.  
3.6 Define, explain, and identify appropriate use of reliability and validity.  
3.7 Demonstrate understanding of measurement error (both systematic and unsystematic).  
3.8 Explain correctly such terms as mean, median, standard deviation, and statistical significance.  
3.9 Understand & interpret appropriately t, F, r, and r squared.  
4.1 Describe descriptive and experimental research methods.  
4.2 Explain the similarities and differences among the research methods used by psychologists.
4.3 Evaluate the appropriateness of conclusions derived from psychological research and the parameters of particular research methods.
5.1 Recognize the necessity of and identify specific ethical behavior in all aspects of the science and practice of psychology.
5.2 Be familiar with the rights of human research participants and therapy clients.
5.4 Describe the concept of informed consent to research and treatment.
5.5 Explain the advantages and disadvantages to research that involves deception.
5.6 Identify the role that an institutional review board plays in psychological research.
7.1 Demonstrate understanding of the internal and external validity of the information obtained.
7.2 Distinguish between scientific findings and opinions.
7.3 Evaluate the strengths and weaknesses of a study.
7.4 Frame questions or generate hypotheses about human behavior based on experiences and/or exposure to information from scientific literature, the general media, and specialized sources.
8.1 Generate new research questions based on understanding of current research.
8.3 Plan and execute a project that involves data collection.
8.5 Demonstrate an ability to articulate, during an oral presentation: strong knowledge of the research project; the ability to speak clearly, naturally and with enthusiasm; the ability to use visual aids to enhance the presentation; the ability to answer difficult questions clearly and succinctly; and the ability to present information in logical, interesting sequence which audiences can follow.
8.6 Create a poster presentation that demonstrates: the ability to use visual aids to enhance the presentation; the ability to answer difficult questions clearly and succinctly; and the ability to present information in logical, interesting sequence which audiences can follow.
9.2 Use reasoning to recognize, develop, defend, and criticize arguments and other persuasive appeals.
9.3 Approach problems effectively by defining the problem, generating multiple possible goals and solutions, evaluating the quality of the possible solutions, and selecting the optimal solution.
9.4 Demonstrate effective writing skills and use of APA-style in various formats (e.g., essays, technical papers).
9.5 Demonstrate effective verbal skills in various formats (e.g., oral presentations).
9.6 Demonstrate the ability to collaborate effectively.

Course Requirements

Meetings – You are required to attend all group meetings. Group meetings will be Fridays, 10:00AM-12:00PM in N107. These meetings are mandatory. If your schedule does not allow you to attend all the scheduled meetings for their entirety you should not enroll in this course. Tardiness to or absence from three meetings (or more) will result in a no-credit for the course. You are considered tardy if you are more than 15 minutes late to class. You are considered absent if you leave more than 15 minutes early from class. If you are tardy or absent from class, it is your responsibility to contact your teammates or me to find out what you missed and you are responsible for keeping up with deadlines.

Completion of Human Subjects Tutorial – All individuals who participate in research at SDSU
must complete an online tutorial from the Human Research Protection Program. This tutorial will provide important information about ethical research and appropriate treatment of participants. The tutorial can be found at the following website:

http://www-rohan.sdsu.edu/~gra/login.php

You must complete the tutorial, print the certificate you receive upon completion, and give the certificate to me on January 30, 2015.

Running Experiments and Data Entry (4 hours/week) – You will be responsible for collecting and managing data for various studies I am currently conducting. The times, days, and locations for the data collections will vary according to various factors (e.g., the lab’s availability, your schedule, etc.). All students will share in the responsibilities of data management, as well.

Team Study – You will work with other students together on a literature review, data analysis, and presentation of a study of your own for the 2015 San Diego State University Student Research Symposium and the 2015 annual conference of the Western Psychological Association. The following are mandatory deadlines related to the team studies. All assignments should be emailed to me by 8AM the day that they are due:

1/30: First Draft of Introduction and Method slides with scripts
2/06: First Draft of Results and Discussion slides with scripts
2/13: Second draft of Introduction and Method slides with scripts
2/20: Second draft of Results and Discussion slides with scripts
2/27: Final draft of entire presentation (including title slide and references) with final draft of scripts

Article Summaries – You will read up to two articles per week from scientific journals related to our studies, especially in the beginning of the semester. You are required to use the “Article Summary Form” on our Blackboard site under the Course Documents section to summarize each article you read. The amount of reading done will depend upon the existing literature. You are expected to be able to summarize verbally what you read, too.

Happy Fun Stats Concept of the Week – The team will discuss one statistics or research-methodology concept at each meeting. Each concept will build upon the last meeting’s topic. Between meetings, you should study each concept reviewed so that you can verbally describe it at the next meeting. The best way to do this is to share what you learn in each meeting with people throughout the week. Spread the word about the marvels of statistics!

Paper: Research Experiences/Personal Statement – You will turn in a rough draft and a final draft of a 3-page paper that summarizes your research experiences. You are strongly encouraged to write this paper as a personal statement that accompanies graduate-school applications. You will turn in your rough draft on Friday, April 24, 2015; you are required to email me your draft by 8AM and to bring in copies of your draft without your name for each of your fellow students in the course during that day’s meeting. Each student in the course will provide written feedback on each student’s draft; your feedback to your fellow students’ statements is due Friday, May 1, 2015. The final draft will be emailed to the instructor by 8:00AM on Friday, May 8, 2015.
Grading

The course is offered for credit/no credit and you will receive a credit grade for completion of the aforementioned requirements. Students who do not meet the requirements listed above will not receive a credit grade.

Please let me know if you encounter any difficulties with completion of the course requirements or if there is something in particular you’d like to learn about that pertains to this course. I’d like to facilitate you having as much of a positive experience as possible. If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Norma Aguilar at (760) 768-5637 or Student Affairs at (760) 768-5502. To avoid any delay in the receipt of your accommodations, you should contact Norma Aguilar in Student Affairs at SDSU-IV as soon as possible. Please note that accommodations are not retroactive, and that accommodations based upon disability cannot be provided until you have presented your instructor with an accommodation letter from Student Disability Services. Your cooperation is appreciated.

A Couple More Things

In order to preserve academic integrity and encourage students to make responsible choices, all students found cheating or plagiarizing will receive an automatic fail for the course and will be sent to the appropriate administrative body for review for the aforementioned consequences. Please review the university’s definition of plagiarism in the SDSU General Catalog.

This course requires students to participate in field trips, research, or studies that include course work that will be performed off-campus. Participation in such activities may result in accidents or personal injury. Students participating in these events are aware of these risks, and agree to hold harmless San Diego State University, the State of California, and Trustees of the California State University and Colleges and its officers, employees, and agents against all claims, demands, suits, judgments, expenses, and costs of any kind on account of participation in the activities. Students using their own vehicles to transport other students to such activities should have current automobile insurance.