Student Guide to PSYC 300: Methods and Analyses Core Project

What is PSYC 300?
PSYC 300 (Methods and Analyses Core Project) is a research-based course that was recently added to the psychology curriculum. Students may enroll in PSYC 300 after completing PSYC 200 (with a grade of C- or better), and prospective majors are encouraged to do so as soon as possible after completing PSYC 200.

PSYC 300 is best conceptualized as a “how to” course. In other words, the focus of the work is on how to put the principles that you learned in PSYC 200 into practice in the pursuit of new scientific knowledge. This course will challenge you to read, think, and behave like a psychological scientist.

What should I expect to do while taking PSYC 300?
In PSYC 300, you will work closely with a psychology faculty member to conduct research in a sub-discipline of psychology (e.g., clinical, cognitive, developmental, health, social, etc.). The major learning objectives of the course will be met through hands-on research activities within that sub-discipline, which may include literature reviews, study design and programming, data collection and analysis, and disseminating results through the creation and presentation of research posters and papers. Students across lab sections of PSYC 300 will also meet jointly to review, discuss, and deepen our collective understanding of general research topics (e.g., principles of research design, research ethics, working with community members) and to participate in colloquia with invited speakers. The course culminates in a department-wide research poster session in which PSYC 300 students will report the results of their project-based work during the semester.

As with all 1-unit courses at the University of Richmond, PSYC 300 students are expected to devote 10-14 hours per week to course activities, including attending scheduled lab meetings and colloquia, completing assigned readings, working on assignments, and completing research-related tasks (e.g., data collection, scoring/coding, etc.). In addition to the M and F 12:00-1:15pm time slots that are reserved for this course, you should expect to work with your faculty mentor to identify additional “lab hours,” during which you will be working in the lab to complete research-related tasks.

Am I required to take PSYC300?
Maybe. Psychology majors whose date of first enrollment at UR was in Fall 2017 or later (including transfer students) are required to take PSYC 300 to fulfill the major requirements. Psychology majors who enrolled at UR before Fall 2017 are not required to take PSYC 300 to fulfill the major requirements, although they may do so to fulfill one of their elective courses. Psychology minors (regardless of their date of UR enrollment) may take PSYC 300 to fulfill one of their elective courses for the minor (provided they have not yet taken PSYC 361), though they are not required to do so.

How does PSYC300 benefit me?
PSYC 300 is designed to increase the rigor of the psychology major and to further develop the methodological and analytical knowledge that you gain in PSYC 200. It does so by providing an opportunity for you to work closely with a faculty mentor in an intensive, research-based course that requires considerable “hands on” (or experiential) learning. Students who complete this course will be able to contribute to and evaluate scientific research with greater skill and confidence. And, for all students, regardless of their career plans, it is expected that PSYC 300 will foster your intellectual curiosity, creativity, critical thinking, and skill in interpersonal communication, and better prepare you to excel in your post-college life.

For students who are planning to apply to graduate school in psychology or a closely related field, it may also be useful to conceive of PSYC 300 as a stepping-stone in your undergraduate psychology career. Completing at least one unit of PSYC 300 by your junior year may better position you to pursue a Summer Research Fellowship following your junior year, which in turn would lay the groundwork for completing a senior research project or honors thesis the following year. Your academic advisor would be happy to help in planning such a timeline for your undergraduate career.
How do I register for PSYC 300 (first time students)?
First-time PSYC300 students register for PSYC300 during the typical registration rotation but you will need to prepare by learning more about each lab.

1. Review the descriptions of the labs and faculty mentors that are open for registration for Fall 2020 (see below). Feel free to contact individual mentors to ask questions about their lab.
2. Create a ranked list of your lab/mentor preferences, including the CRN number. Just like with FYS, we recommend you have backups in case your preferred lab is full.
3. Register for a lab/mentor during your registration rotation. Note that additional registration slots will be reserved specifically for first years and sophomores.
4. If you were unable to register for a P300 slot during the registration period, please contact the course coordinator for additional assistance.

I have a course conflict. Can I still register for PSYC 300?
No. PSYC 300 is scheduled for M and F, 12:00-1:15p.m, for the Fall 2020 semester. During these hours, you will be expected to attend lab meetings and colloquia and to be present and available for other course-related work. So, it will not be possible to receive course conflict overrides.

Can I take PSYC 300 more than once?
Possibly. With an instructor’s permission, you may repeat PSYC 300 for credit. You should contact your specific instructor for an override.

   For psychology majors: If you did so, the second unit would count toward the major requirement for “three electives at the 300 or 400 level.” Note though that no more than two units of 300-level research coursework (PSYC 300 and/or PSYC 361) may be applied to the major.

   For psychology minors: If you did so, note that the second unit would not count toward your minor requirements. No more than one unit of 300-level research coursework (PSYC 300 and/or PSYC 361) may be applied to the minor.

What is the difference between PSYC 300 and PSYC 361?
PSYC 300 (Methods and Analyses Core Project) and PSYC 361 (Independent Research) are similar in that both involve working closely with a psychology faculty member to conduct research and are situated at the 300-level of the curriculum. However, PSYC 300 is required for majors (whose date of first enrollment at UR was in Fall 2017 or later, including transfer students), whereas PSYC 361 is not. PSYC 300 is also a traditionally graded course that is only offered in 1-unit increments, whereas PSYC 361 is available as pass/fail only with .5- and 1-unit options available.

Where can I find out more about each lab?
Information about faculty members’ labs and research programs are available on the psychology website. Short descriptions of each lab that is offering PSYC 300 in the Fall 2020 semester are also included on the following pages.
Alperin Lab | Dr. Brittany Alperin
A large portion of our daily life is encompassed by spontaneous thought. Our minds wander and attention shifts from the world around us to a happy memory, a worry, or a future plan. What spontaneous thoughts do you have and how do they affect you? Students doing research in the Alperin Lab study the content and process of spontaneous thought (thoughts that arise without intention) and seek to answer questions such as: What is the impact of spontaneous thought on mental health and well-being? Why are some people good at noticing their spontaneous thoughts whereas others are not? Can we train our attention to be better at this? For the Fall of 2020, we will be starting a study on the relationship between spontaneous thought and symptoms of anxiety and depression. Students will gain experience collecting data from self-report measures, cognitive tests, and event related potentials (ERPs; measurement of brain waves).

Heroism Science Lab | Dr. Scott Allison
How do people become heroes? What psychological needs do heroes satisfy? What separates heroes from villains and good from evil? The Heroism Science Lab addresses questions such as these using a variety of methods, including survey research, interview techniques, archival studies, qualitative analysis, and experimental methodology. Current research studies are examining the difference between heroism and leadership; the role of gender and gender stereotyping in hero and leader development; the intersection of nostalgia and heroism science; the psychological differences between personal and cultural heroes; and cross-cultural differences in heroism and in perceived heroism.

Berry Lab | Dr. Jane Berry
As human beings, we are remarkably adept at remembering certain things and forgetting others. How do such memory and forgetting tendencies change over the life span? What allows us to remember vividly our first kiss or the site of the Grand Canyon at sunset but to forget an embarrassing social encounter, or to distort it so that we remember it more positively than it actually occurred? As we age, how is it possible that we can forget the name of someone we met two minutes ago but easily recall the name of our first-grade teacher? The Berry Lab investigates memory and other cognitive changes associated with aging, including how people think about those changes (metacognitive aging). For Fall 2020, we will focus on memory strengths and deficits associated with aging, including spared monitoring of new learning, the positivity effect, and specific memory deficits in older adults. Our methods include online surveys, individual testing sessions, and eye-tracking techniques. Students in this lab must be comfortable interacting with adults ranging in age from 18 to 98 years.

Knouse Lab (KNAB) | Dr. Laura Knouse
The Knouse Lab investigates self-regulation problems in people with and without Attention-Deficit/Hyperactivity Disorder (ADHD) with a focus on cognitive and behavioral interventions to help improve self-regulation—particularly in college students. Towards this goal, our work also focuses on better understanding the cognitive, emotional, and behavioral processes that contribute to effective and ineffective self-regulation. An ongoing project in our lab this semester focuses on using Ecological Momentary Assessment—where participants complete multiple short questionnaires per day on their cell phones—to understand how overly optimistic thoughts may negatively impact self-regulation.

Lundberg Lab | Dr. Kristjen Lundberg
Using a variety of methods, including behavioral experiments, quantitative methods, and community-based learning, students in the Lundberg Lab explore the answers to questions such as: How do social group-based disparities relate to our social thoughts, feelings, and behaviors? Why do people sometimes act in prejudiced ways even when they intend to be fair? And, most critically, how and why do status-related disparities (i.e., inequalities) exist and persist? In Fall 2020, we will be focusing particularly on implicit bias—automatic negative feelings toward members of a social group—and examining the circumstances under which educating others about implicit bias may lead to positive social change.

Behavioral Neuroscience Lab | Dr. Kelly Lambert
In general, behavioral neuroscience explores the connections among the brain, behavior and environment. In the UR behavioral neuroscience lab, we are interested in experience-based neuroplasticity—such as the neurobiological effects of parenting experience, enriched environments, and effort-based reward contingency training. We use various
behavioral tasks with our rodent (rat) model; most behaviors are monitored with a computerized observational system. Additionally, endocrine assays are conducted on fecal samples to quantify targeted hormone levels and immunohistochemistry techniques are used for neural analyses. Various microscope-computer stations are provided in the lab to quantify stained neural tissue. The theme for Fall 2020 will continue to focus on types of environments that lead to adaptive and healthy behavioral and neural functions. Because our experimental model is the rat, students will be trained to handle and care for laboratory rodents before commencing research. Consequently, students need to be comfortable handling animals to conduct behavioral neuroscience research.

** Not accepting PSYC 300 Students for Fall 2020 **

Beyond Categories Lab | Dr. Cindy Bukach

Project YEARS (Youth Emotional Adjustment and Relationships in School) | Dr. Karen Kochel

Lowder Language Lab | Dr. Matthew Lowder

NERDS+ Lab | Dr. Camilla Nonterah

What if I still have questions about PSYC 300?
If, after reviewing the information here, you still have a question about PSYC 300, you may email the Course Coordinator, Dr. Laura Knouse, at knouse@richmond.edu.