

# Psychological & Brain Sciences

The Department of Psychological & Brain Sciences teaches graduate students who are interested in becoming the next generation of academic researchers and educators in psychological and brain sciences. Graduate study may be undertaken in the following general areas: Behavior, Brain & Cognition; Clinical Science; Aging & Development; and Social & Personality Psychology. The traditions of Washington University and the department encourage interdisciplinary graduate study, both between the subfields of psychological and brain sciences and across other disciplines. Therefore, although students must affiliate with at least one of the areas within psychological and brain sciences, they are frequently affiliated with multiple areas within the field. In addition, many graduate students in the department also engage in interdisciplinary learning, scholarship, and research. For example, cross-disciplinary opportunities and research are available in the Division of Biology and Biomedical Sciences (e.g., neuroscience, genetics); in the programs of Linguistics and of Cognitive, Computational, and Systems Neuroscience; in African-American Studies; and in Philosophy-Neuroscience-Psychology as well as in several departments in the School of Medicine and McKelvey School of Engineering.

The Department of Psychological & Brain Sciences admits students for full-time study toward the **PhD** and does not offer a standalone master's degree. However, students are required to complete a master's degree with a thesis as part of the requirements for a PhD. In addition, the PhD includes required courses (including statistics, research methods, ethics, and several core content areas), a subject matter exam, at least three semesters of a teaching experience to fulfill the doctoral teaching requirement, and consistently high-quality research productivity that results in publishable findings.

The Department of Psychological & Brain Sciences also offers the **Graduate Certificate in Quantitative Data Analysis**, which is open to graduate students of various disciplines. Advanced skills and knowledge in quantitative analysis, methods, and interpretation are critical assets for scholars in a wide range of disciplines within the social sciences. In addition, many of the important practical, analytical, and conceptual skills are shared across disciplines. Many of the graduate programs in the social sciences include basic quantitative analysis skills within the core required curriculum of their department, but many students would benefit from advanced preparation in this domain. The certificate program provides an organized means for students to achieve an advanced level of knowledge and skill in quantitative social science data analysis, interpretation, and visualization that can be applied and shared in a variety of occupational domains.

The Graduate Certificate in Quantitative Data Analysis requires students to master both an introductory level and a more advanced level of quantitative skills and knowledge. Some of the introductory-level courses may overlap with courses that are already required within

a student's individual PhD program curriculum, but the advanced level will require students to go beyond the basic expectations of their graduate program to achieve a greater depth and breadth of their knowledge and abilities.

Students interested in the Graduate Certificate in Quantitative Data Analysis should first apply for admission to the Washington University department in which they wish to obtain a graduate degree. After being admitted, students should notify their department advisor and the Graduate Certificate in Quantitative Data Analysis program director (currently [dbarch@wustl.edu](mailto:dbarch@wustl.edu)) of their plans to obtain the certificate. In addition, students should submit an Application for Admission to Certificate Program form to the Office of Graduate Studies, Arts & Sciences, and send a copy to the Graduate Certificate in Quantitative Data Analysis office.

Phone: 314-935-6520  
Website: <https://psych.wustl.edu/graduate-program>

## Faculty

### Chair

#### **Jeffrey M. Zacks**

Edgar James Swift Professor in Arts & Sciences  
Professor of Psychological & Brain Sciences; Radiology  
PhD, Stanford University

### Associate Chair

#### **Denise P. Head**

Professor of Psychological & Brain Sciences  
Associate Professor of Radiology  
PhD, University of Memphis

### Directors of Graduate Studies

#### **Julie M. Bugg**

Professor of Psychological & Brain Sciences  
PhD, Colorado State University  
Director of the Behavior, Brain and Cognition

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Professor of Psychological & Brain Sciences  
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## Department Faculty

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Professor of Psychological & Brain Sciences; Anthropology; Education;  
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Senior Lecturer of Psychological & Brain Sciences  
PhD, Washington University

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Dean's Distinguished Professor of Psychological & Brain Sciences  
PhD, Harvard University

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Lecturer of Psychological & Brain Sciences  
PhD, Washington University

### **Pascal R. Boyer**

Luce Professor of Collective and Individual Memory  
Professor of Sociological Anthropology; Psychological & Brain Sciences

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William R. Stuckenberg Professor in Human Values and Moral  
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Professor of Psychological & Brain Sciences; Radiology; Neuroscience  
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## Affiliated Faculty

**Arpana Agrawal**

Professor of Psychiatry  
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Professor of Spanish and Second Language Acquisition  
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**Cindy Brantmeier**

Professor of Applied Linguistics; Global Studies  
Romance Languages and Literatures (by courtesy)  
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Professor Emeritus of Psychiatry  
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## Faculty Emeritus

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Pediatrics in Psychiatry  
PhD, Washington University

## Degree Requirements

- Psychological & Brain Sciences, PhD
- Quantitative Data Analysis, Graduate Certificate

## Courses

Visit online course listings to view semester offerings for L33 Psych.

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### L33 Psych 500 Independent Study

Prerequisites: Psych 100B and written permission of a supervising  
faculty member and the chair of the department.  
Credit variable, maximum 3 units.

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### L33 Psych 5001 Decision Making

Credit 3 units.

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### L33 Psych 5003 First-Year Seminar for Graduate Students

This optional seminar for first-year students is intended to help orient  
the incoming graduate student to skills important for graduate school  
success. Topics covered include giving research talks, giving feedback  
to and receiving feedback from fellow students, and scientific writing.  
To help focus to these discussions, we will consider how to create

a successful application for the National Science Foundation (NSF) Graduate Research Fellowship Program, and each student will write multiple drafts of the essays relevant to this program. PREREQ: First-year student in the Psychology graduate program or permission of instructor.  
Credit 2 units.

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**L33 Psych 5005 Flash Programming for Psychology**

Students will be given a general introduction on the principles of programming (e.g., the use of functions, variables, arrays, and conditional statements), followed by a step-by-step guide through the techniques necessary to write an entire experiment program from scratch (including but not limited to stimulus presentation, randomization, response logging, and reaction time measurement). In addition, students will be taught the necessary basics of PHP (a general purpose scripting language) in order to load their programs on a server and enable online data collection. The course will consist of 14 weekly 2-hour sessions in which a new concept or technique will be introduced and practiced. Students will also be given an assignment every week to put the studied techniques into practice on their own (an optional study session with a TA could also be made available). Performance will be assessed at the end of the course by a project which will involve each student designing and writing a program for their own experiment.  
Credit 3 units.

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**L33 Psych 5007 Statistics and Data Analysis in MATLAB**

This course will identify and explain statistical principles that are fundamental in data analysis and will show how to translate these principles into practice in the MATLAB programming environment. The course will emphasize nonparametric and computational approaches to statistical problems, and will include topics such as error bars and confidence intervals, probability distributions, statistical significance, hypothesis testing, regression and classification, cross-validation, and bootstrapping. PREREQ: Graduate standing, Psych 5066 and 5067 or equivalent.  
Credit 2 units.

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**L33 Psych 500A Independent Study for a Supplemental Concentration**

PREREQ: Acceptance into a Supplemental Concentration in Psychology. Written permission (Petition for Supervision of Psych 500A) of a member of the faculty of the department (or other approved supervisor) who agrees to supervise the student's work is also required. In addition to the approved research for the Supplemental Concentration, an APA-style research paper must be satisfactorily completed to obtain credit. Petition for Supervision of Psych 500A forms are available in the Psychology Building, room 207B. Students will be enrolled only after they have completed both the Petition for a Supplemental Concentration in Psychology and the Petition for Supervision of Psych 500A, and returned them to Sharon Corcoran in Psychology 207B. Open only to Psychology majors. Credit 3 units.  
Credit variable, maximum 3 units.

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**L33 Psych 5011 Research Designs and Methods**

This course provides graduate students with a broad-based exposure to conceptual and practical issues in planning, designing, executing and evaluating research in the behavioral sciences. Topics include Reliability and Validity, Experimental design, quasi-experimental design, single-case research, and passive observation designs. Prereq: Psych 406 and 407 or equivalent.  
Credit 3 units.

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**L33 Psych 5012 Selected Topics in Design and Statistics**

This course will examine selected problems in the design and analysis of psychological research. Topics include the analysis of change, taxometric methods for investigating individual differences, bootstrapping, analysis methods, and common pitfalls in statistical inference. PREREQUISITE: graduate standing and psych 406, 407 and 5011.  
Credit 3 units.

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**L33 Psych 5015 The Psychology of Academia**

This course will discuss the informal rules and practices of academia. The topics include how to succeed in graduate school, whether or not to take a postdoctoral fellowship before seeking a job, how to get hired, how to get tenure, how to mentor students, how to teach, how to plan your research career, and how to get grants. Other topics include issues of diversity in higher education and different prospects facing newly minted Ph.D.s who go into academia versus those who go into more applied settings. PREREQ: Graduate standing.  
Credit 1 unit.

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**L33 Psych 503 Seminar: Experimental Social Psychology**

This course provides broad exposure to the theory and methods of modern social psychology. The focus of the course will be on current theoretical issues in major areas of the field, including social perception, social cognition, attitude change, self and identity, aggression, prosocial behavior, interpersonal relations, and group processes. PREREQ: Graduate standing.  
Credit 3 units.

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**L33 Psych 504 Traditional and Nontraditional Research Strategies**

Credit 3 units.

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**L33 Psych 505 Seminar in Mathematical Models of Behavior**

Credit 3 units.

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**L33 Psych 506 Meta-analysis: Systematic Use of Past Research**

Credit 3 units.

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**L33 Psych 5066 Quantitative Methods I**

Introduction to the theoretical concepts underlying quantitative methods in psychology. Topics include set theory, probability theory including the basic probability density functions and their cumulative distributions, joint events and stochastic independence, sampling theory and sampling distributions (including the binomial, normal, t, chi-square and F distributions), parameter estimation, interval estimation, the t-test, hypothesis testing, power, and some nonparametric statistics. Prerequisite, Graduate standing.  
Credit 3 units.

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**L33 Psych 5067 Quantitative Methods II**

This course is a continuation of Psych 5066. It provides an introduction to multiple regression/correlation analysis. Topics include bivariate and multiple correlation and regression, representation of nominal or qualitative variables, power and orthogonal polynomials, interactions, analysis of covariance, and repeated measures design. Prerequisite: Psych 5066.  
Credit 3 units.

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**L33 Psych 5068 Hierarchical Linear Models**

Data in the social sciences are frequently organized hierarchically: students are enrolled in courses, which exist within separate schools, which are parts of different school systems; employees work within teams within different divisions of a company; the outcomes for

participants or patients in different treatment groups are measured different numbers of times and include covariates that vary over time; partners, parents, and children are parts of family units that are parts of different communities. Hierarchical data contain dependencies that preclude traditional analyses (e.g., simple analysis of variance or multiple regression), requiring instead an approach that correctly estimates error sources and identifies systematic effects at their appropriate level of influence. This course provides an introduction to the analysis of hierarchical data with an emphasis on the correct identification of models, analysis of hierarchical data with current software, proper interpretation of results, and use of appropriate diagnostic tests for model adequacy. Prerequisites: Psych 5066 and Psych 5067.  
Credit 3 units.

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### L33 Psych 5069 Cognitive Data Methods

The goal of the course is to introduce students to issues and techniques for dealing with cognitive and perceptual discrimination data. More specifically, we will look at the formal methods derived for estimating accuracy, bias, and to a smaller extent reaction time, during behavioral discrimination tasks. The primary theoretical focus will be standard Signal Detection Theory, however, we will also examine decision/detection models that assume categorical knowledge on the part of the observer (a.k.a., Threshold, Discrete State, Multinomial Models). Additionally, the course will focus on ways of isolating putative core processes contributing to performance. A key goal for the term will be to develop an understanding of the close theoretical relationship between these models of individual behavior, and classical inferential statistical tests such as Student's t-test. The main tool we will use to develop this understanding is data simulation (viz. Monte Carlo Methods) and actual data analysis of a classroom project. PREREQ: Graduate standing.  
Credit 3 units.

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### L33 Psych 508 Memory and Cognition: Prospective Memory

The purpose of this course is to provide coverage of the research and theories pertaining to prospective memory-remembering to perform an intended action at an appropriate instance in the future. We will examine the experimental literature concerned with the memory and cognitive processes involved in this type of memory functioning. The topics in the course will include prospective memory and aging and the neuropsychology of prospective memory. 3 units.  
Credit 3 units.

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### L33 Psych 5081 Consciousness, Cognitive Control and Subjective Experience

This course will provide advanced study in selected areas within attention, psycholinguistics, reading, computational modelling of speech recognition and production, memory, and cognitive neuropsychology. Distinguished scientists within each of these fields will lead weekly discussions of their work. Emphasis will be placed on experimental research within each of these domains. PREREQUISITE: PSYCH 360 OR EQUIVALENT, OR PERMISSION OF INSTRUCTOR. Enrollment limited to 20.  
Credit 3 units.

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### L33 Psych 5082 Working Memory and Executive Control

This course will provide a graduate-level survey of current research and theory on working memory and executive control. Topics will be examined from cognitive, neurobiological, and computational perspectives. Primary focus will be on major theoretical models and their empirical support. Class goal will be to critically examine and synthesize these models in the hopes of revealing both sources of

convergence and sources of conflict. A second focus will be on the nature of relationship between working memory and executive control, to determine where the two constructs overlap and where they are distinct. Prerequisite: GRADUATE STANDING.  
Credit 3 units.

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### L33 Psych 5084 Cognitive Illusions

Cognitive illusions may be defined as systematic deviations between events in the world and their perception and retention, or between objective and subjective views of reality. This course will cover illusions of perceiving, remembering, and thinking, with attention both to basic cognitive processes underlying illusions and their application to social phenomena, such as processes involved in perceiving other people. Prerequisite: Graduate standing.  
Credit 3 units.

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### L33 Psych 5085 Human Memory

A survey of issues related to the encoding, storage and retrieval of information in humans.  
Credit 3 units.

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### L33 Psych 5086 Retrieval Processes in Human Memory

This course will examine issues in the utilization of stored information from memory. Topics will include recovered memories from repeated testing, effectiveness of retrieval cues, effortful and automatic processes in retrieval, conscious correlates of memory retrieval, and the neural underpinnings of retrieval, among others. Prerequisite: PSYCH 406.  
Credit 3 units.

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### L33 Psych 5087 Advanced Cognitive Psychology

This course provides an advanced introduction to core topics in cognitive psychology. Topics may include attention, memory, categorization, metacognition, and decision modeling. Prerequisite: Graduate standing.  
Credit 3 units. EN: S

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### L33 Psych 5088 Key Readings in Cognitive Psychology

This course will explore the core readings that have shaped the way scientist tackle fundamental aspects of human cognition. These includes cognitive methods, pattern recognition, attention, working memory, episodic memory, semantic memory, language acquisition, language comprehension, decision making, problem solving, and expertise. Each week we will explore at least three "classic" readings on a given topic along with some more recent papers. The goal is to expose students to this foundational literature, and develop a better understanding of the zeitgeist the set the stage for these papers to change how researchers tackled specific problems. This course will be taught seminar style. The Instructor will be responsible for introducing the topics and setting the context for the key readings, with a student leading the discussion of the readings for that week. Students will also be responsible for generating discussion questions each week.  
Credit 3 units.

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### L33 Psych 5089 Cognitive Neuroscience of Memory

An advanced exploration into what functional neuroimaging and neuropsychological studies have revealed about human memory. Topics include working memory, semantic memory, encoding and retrieval of episodic memory, and false memory, among others. PREREQ: Graduate standing.  
Credit 3 units.

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**L33 Psych 5090 Cognitive Neuroscience of Human Memory**

A survey of issues related to the cognitive neuroscience of human memory will be discussed including working and long-term memory. Reading will consist of classic works by James, Fuster, Goldman-Rakic, Milner, Squire as well as many contemporary articles that highlight hot issues and new techniques. Requirements will include readings, attendance, brief presentations, and active participation in classroom discussion. Prerequisite: Graduate standing. Same as L41 Biol 5606. Credit 3 units.

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**L33 Psych 5093 Imagery and Memory**

This graduate seminar will focus on the many ways in which imagery and memory interact. From the time of the ancient Greeks, it was appreciated that imagery can assist later remembering. But imagery also involves many of the same neural mechanisms as remembering. We will consider how imagery relates to memory encoding and retrieval and what differentiates remembering from mental imagery. PREREQ: seminar in Cognitive Psychology or permission of instructor. Credit 3 units.

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**L33 Psych 5095 Concepts in the Science of Memory**

The topic of memory is approached scientifically from a number of disparate perspectives, but four will form the focus of this course. Cognitive psychologists measure behavior of people in experiments (e.g., how much can people remember under various experimental conditions with different types of materials?) and provide cognitive theories and models of memory. Behavioral psychologists measure learning and performance from the behavior of other animals. Systems and cognitive neuroscientists consider brain mechanisms underlying memory, whereas neurobiologists examine more basic processes underlying learning at synaptic and molecular levels. This course is aimed at asking if a unified science of memory is possible, melding the various viewpoints and levels considered above, as well as others. In this course we will consider 16 critical concepts or ideas in the science of memory from the viewpoints listed above (and others, where appropriate). The course is a graduate course intended largely for students in psychology, neuroscience, and the PNP program. Credit 3 units.

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**L33 Psych 5099 Advanced Seminar in Human Memory**

An advanced exploration into a selection of current research topics on human memory using psychological, functional neuroimaging, and neuropsychological methods. Topics include encoding and retrieval of episodic memory, autobiographical memory, episodic future thought, and related topics. PREREQ: Cognitive Proseminar or permission of instructor. Credit 3 units.

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**L33 Psych 510 Clinical Psychology I: Objective Assessment Processes**

Credit 3 units.

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**L33 Psych 5102 Geriatric Interdisciplinary Teams**

Interdisciplinary collaboration is a foundation of geriatric care, yet students are often trained with little exposure to the theories, methods, and practice techniques of disciplines complementary to their own. The purpose of this course is to bring together students across schools and disciplines who are training to work with older adults. Students will learn about 1) the theories and methods typical of each discipline, and 2) features of effective interdisciplinary teamwork that is essential in high-quality geriatric care. Same as I50 INTER D 5001. Credit 3 units.

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**L33 Psych 511 Clinical Psychology II: Projective Techniques**

Credit 3 units.

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**L33 Psych 5111 Personality Assessment**

An introduction to the theory, development, and evaluation of personality assessment techniques and tests. Materials will include introduction to psychometrics of test construction, and review of the literature on reliability and validity of commonly used instruments. Prerequisite: Graduate standing in Psychology. Credit 3 units.

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**L33 Psych 5112 Psychological Assessment I**

An introduction to the theory, development, and evaluation of cognitive assessment techniques and tests is provided. Students also gain experience in the administration, scoring, and reporting of results from standard assessment tools. Less commonly used approaches such as observational methods will be discussed. Relevant research relating to the assessment of diverse populations will be examined. PREREQUISITE; OPEN TO CLINICAL PSYCHOLOGY GRADUATE STUDENTS AND OTHER ADVANCED GRADUATE STUDENTS WITH PERMISSION OF INSTRUCTOR. Credit 3 units.

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**L33 Psych 5113 Psychological Assessment II**

This course is an introduction to the theory, development, and evaluation of personality and diagnostic assessment techniques and tests. Topics will include psychometric issues (e.g., reliability, validity) as well as appropriate usage and interpretation of instruments commonly used to assess personality, mood, and psychopathology. The course involves the practical application and interpretation of psychological assessments. Prerequisite: Graduate standing in Psychological & Brain Sciences. Credit 3 units.

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**L33 Psych 5114 Clinical Science: Professional Issues**

As the third in a series of three core clinical science courses, this course focuses on (a) ethical foundations of clinical practice; (b) knowledge of issues of diversity and their application in clinical practice; (c) skill building in essential empirically supported techniques; and (d) building knowledge in current issues and standards of clinical science. The latter course content is purposefully kept open so that this course can be adapted as needed to address the most crucial concerns in the field. Prerequisites: Graduate study in the clinical science program or permission of instructors. Credit variable, maximum 3 units.

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**L33 Psych 5121 Assessment Practicum**

Credit 3 units.

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**L33 Psych 516 Applied Multivariate Analysis**

The purpose of this course is to provide students with a working knowledge of multivariate statistics including multivariate multiple regression, multivariate analysis of variance, discriminant analysis, factor analysis, and canonical correlation analysis. PREREQUISITE, PSYCH 5066 and 5067 or their equivalent. Credit 3 units.

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**L33 Psych 5165 Applied Longitudinal Data Analysis**

This course covers modern methods of handling longitudinal, repeated measures. It will introduce the rationale of measuring change and stability over time to study phenomena as well as how within-person designs can increase statistical power and precision as compared with more traditional designs. Most the course will use multi-level models

and latent (growth) curve models to specify patterns of change across time. Additional topics include visualization, measurement invariance, time-to-event models and power. Prerequisite: Familiarity with R and with MLM and/or structural equation models.  
Credit 3 units.

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### **L33 Psych 5167 Applied Bayesian Statistics for Psychologists**

Bayesian parameter estimation and hypothesis testing offer a useful alternative to the classic frequentist paradigm within psychological science. This class will cover the foundations of Bayesian inference and hypothesis testing with the primary emphasis on fitting multiple regression and multi-level models common within psychology. A variety of response distributions will be discussed: Gaussian, binary and count, ordinal, survival, probability, and zero-inflated models, among others. Topics include: model calibration, regularization, prior and posterior predictions, Bayes factors, missing data, Bayesian power, cross-validation, Bayesian meta-analysis, distributional models, and multivariate response models. Models will be fit using the R package brms, which relies on the more general Stan language. PREREQ: PSYCH 5068 or a proficiency in multilevel modeling  
Credit 3 units.

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### **L33 Psych 5182 Perception, Thought, and Action**

This course focuses on current topics in visual perception, visual attention, and the control of action. Readings consist of recent journal articles. Class meetings emphasize presentation and discussion of the material in the readings. Limited to 15 students. PREREQ: Psych 100B/1000 and one of the following: Psych 301/3010, Psych 330/3300, Psych 3401, Psych 344/3440, Psych 360/3600, Psych 361/3610, Psych 3604, Psych 380/3800, Psych 433/4330, or Psych 4604.  
Same as L33 Psych 4182

Credit 3 units. A&S IQ: NSM Arch: NSM Art: NSM BU: BA

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### **L33 Psych 519 Advanced Cognitive, Computational and Systems Neuroscience**

This course will develop critical thinking and analysis skills with regard to topics in Cognitive, Computational and Systems Neuroscience. Course format will be a series of modules composed of intensive, faculty-led case studies on interdisciplinary topics at the intersection of psychology, computation and neuroscience. The goal will be to highlight the benefits of integrative, interdisciplinary approaches, by delving into a small set of topics from a variety of perspectives, rather than providing a survey-level introduction to a broader set of topic areas. Modules will involve a combination of lectures and student-led discussion groups, with students further expected to complete a multi-disciplinary integrative final review paper. Case-study topics will vary somewhat from year to year, but are likely to include some of the following: temporal coding as a mechanism for information processing, coordinate transformations in sensory-motor integration, mechanisms of cognitive control, motor control strategies including application to neural prosthetics, and memory systems in health and disease.  
Credit 3 units.

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### **L33 Psych 5191 Cognitive, Computational, and Systems Neuroscience Project Building**

The goal of this course is to help students in the CCSN Pathway develop the critical thinking skills necessary to develop and implement high quality, interdisciplinary research projects. Throughout the course of the semester, each student will develop a research plan in their chosen area of interest. The plan will be developed in consultation with at least two faculty members (from at least two different subdisciplines within the pathway) as well as the other students and faculty participating in the course. The culmination of this course will be for each student to produce an NIH-style grant proposal on the research project of their choosing. For most students, this will serve either as their thesis proposal or a solid precursor to the thesis proposal. The course will

be designed to help facilitate the development of such a research plan through didactic work, class presentations, class discussion, and constructive feedback on written work. The course will begin with a review of written examples of outstanding research proposals, primarily in the form of grant submissions similar to those that the students are expected to develop (i.e., NRSA style proposals, R03 proposals). Review of these proposals will serve as a stimulus to promote discussion about the critical elements of good research proposals and designs in different areas. Each student will be expected to give three presentations throughout the semester that will provide opportunities to receive constructive feedback on the development and implementation of research aims. The first presentation (towards the beginning of the semester) will involve presentation of the student's general topic of interest and preliminary formulation of research questions. Feedback will emphasize ways to focus and develop the research hypotheses into well-formulated questions and experiments. The second presentation will involve a more detailed presentation of specific research questions (along the lines of NIH-style Specific Aims) and an initial outline of research methods. The final presentation will involve a fuller presentation of research questions and proposed methods. Feedback, didactic work, and group discussion throughout the semester will include guidance on critical components of the development of a research plan, including how to perform literature searches, formulate testable hypotheses, write critical literature summaries, and design experiments and analyses. The course will meet once a week, with faculty members from different tracks within the Pathway present at each meeting. This will allow students to receive feedback from several perspectives. Prerequisite: Member of CCSN Pathway, permission of instructor.  
Same as L41 Biol 5622

Credit 3 units.

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### **L33 Psych 521 Seminar in Child and Family Psychopathology**

Credit 3 units.

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### **L33 Psych 5211 Psychopathology of the Family**

Credit 3 units.

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### **L33 Psych 5225 The Psychology of Social Stigma**

This seminar aims to introduce students to theoretical and empirical social psychological research on prejudice and social stigma. The topics covered will include examinations of why individuals stigmatize by exploring cognitive, evolutionary, self and system justification explanations. The course will examine the effects of stigmatization for low-status groups (i.e., stereotype threat, dis-identification, compensation and health outcomes). We will explore the role of stigma in intergroup interactions and variations in the experience of stigma. Finally, we will examine high-status groups' perceptions of bias (e.g., perceptions of anti-white discrimination). Prerequisite: Graduate standing in Psychological & Brain Sciences or related field with permission of instructor.

Credit 3 units.

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### **L33 Psych 5227 The Science of Close Relationships**

This graduate seminar focuses on theory and research in close relationships. The goals of the course are to (1) familiarize students with classic and contemporary theorizing in the field of close relationships, (2) read and critique influential research in the field, and (3) introduce students to some of the field's unique methodological and statistical challenges. The course will cover topics related to the initiation, development, maintenance, and dissolution of close relationships, and discuss implications of close relationships for individuals' psychological and physical health. Although the course draws mainly on theory and research from social and personality psychology, topics are relevant to other areas such as clinical, developmental, or cognitive psychology. PREREQ: Graduate standing.



Credit 3 units.

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**L33 Psych 523 Research in Clinical Psychology I**

Credit 3 units.

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**L33 Psych 523A Clinical Method I**

Credit 3 units.

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**L33 Psych 524 Research in Clinical Psychology II**

Credit 3 units.

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**L33 Psych 5245 Graduate Research Seminar**

This course consists of weekly seminars on different topics of research in psychological science. Students are expected to participate through attendance, questions, and occasional presentation of their own research. Credit for this course is restricted to graduate students in the department of Psychological & Brain Sciences. Prerequisite: Graduate standing in Psychological & Brain Sciences.

Credit 1 unit.

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**L33 Psych 524A Clinical Method II**

Credit 3 units.

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**L33 Psych 5251 Proseminar in Health Psychology**

This course introduces students to Health Psychology and helps them develop the conceptual and methodological skills necessary for interpreting research in this area. It explores (a) the conceptualization of major constructs in the field, including stress, coping, social support, personal control, personality, and social class, (b) the empirical evidence linking these constructs to health outcomes in the domains of infectious disease, asthma, cancer, and cardiovascular disease, and (c) the issues involved in successfully measuring relevant constructs, mediating pathways, and health outcomes. Prerequisites: Graduate standing or permission of instructor.

Credit 3 units.

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**L33 Psych 5252 Health Promotion**

This course will compliment that in "Behavioral Medicine" by emphasizing research concerning community, workplace and similar approaches to prevention, risk reduction, and support of ongoing disease management. Special research issues of such settings will be reviewed. Note: This course is part of a sequence of courses comprising a special interest track in Health Psychology for graduate students in clinical and other areas of Psychology. Prerequisite: Graduate standing.

Credit 3 units.

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**L33 Psych 5253 Behavioral Medicine**

Reviews the research literature on the biopsychosocial aspects of prevalent chronic illnesses and psychophysiological disorders such as diabetes, cardiovascular disorders, cancer, AIDS, and chronic pain syndromes. Examines the research basis of clinical interventions in behavioral medicine, with an emphasis on risk factor modification, treatment of psychophysiological disorders and of psychiatric comorbidity in medical patients, enhancement of patient care, and improvement of quality of life.

Credit 3 units.

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**L33 Psych 5254 Research Practicum in Health Psychology**

Credit 3 units.

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**L33 Psych 5255 Lifespan Health Psychology**

While some activities and psychosocial variables promote physical health across the life course, several components are best understood within the context of the given developmental period. Indeed, risk and resilience factors for health differ from adolescence to older adulthood. This class addresses how best to promote health and well-being through the lens of lifespan developmental theories. It will provide an overview of this theoretical work, as well as consider health psychology research specific to each developmental period. The class will focus on outside readings from journal articles and chapters each week, with the expectation that students will come ready to discuss and critique these works in class. In addition to class discussion, students will be assessed based on brief response papers to the weekly readings, as well as a final paper that applies lifespan theories of development toward better understanding health psychology across the life course.

Credit 3 units.

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**L33 Psych 531 Child and Adolescent Development**

Credit 3 units.

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**L33 Psych 532 Seminar in Developmental Psychology: Language and Cognitive Development**

This course will survey contemporary and seminal journal articles in cognitive and linguistic development, with a focus on both empirical and theoretical approaches to each field. Some attention may also be given to biological, perceptual, and social development. The course will provide students with broad exposure to the theory and methods of cognitive areas of developmental psychology. Prerequisite: Graduate standing.

Credit 3 units.

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**L33 Psych 5321 Advanced Developmental Psychology**

This graduate course will provide an in-depth survey of the foundations, theories, and current research in developmental psychology. We will study the cognitive and social processes that underlie how humans develop, with an emphasis on the period from infancy to late childhood. Topics will include the development of perception, action, language, concepts, emotions, morality, and social cognition.

Credit 3 units.

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**L33 Psych 5345 Current Directions in Research on Genetic and Environmental Contributions to Psychological Phenomena**

Credit 3 units.

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**L33 Psych 5352 Theories of Personality Psychology**

This course is intended to provide a comprehensive review of major theories in personality psychology. Across the semester, students will be introduced to historical and contemporary theories in personality science, capturing four major research areas: definitions of personality, personality trait taxonomies, personality development across the lifespan, and goals and motives. Each week, students will be assigned chapters from the Handbook of Personality that provide broad overviews of the topic, in addition to empirical papers related to the week's topic. Students will be expected to engage in and lead class discussions, as well as complete a semester-long paper project that will entail applying the theoretical frameworks mentioned in class to the student's personal research area. PREREQ: Graduate Standing

Credit 3 units.

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**L33 Psych 5358 Personality Psychology and Behavioral Dynamics**

This course is designed to give graduate students an overview of current research and debate in the field of personality and individual-differences psychology. Topics may include: personality assessment, trait structure, socio-cognitive theories, development, goals/motives, person perception, narrative methods, personality pathology, person-situation integration, personality in applied fields (I/O, health, education), vocational interests, intelligence, temperament, and behavior genetics. PREREQ: Graduate standing.  
Credit 3 units.

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**L33 Psych 537 Advanced Psychopathology**

This is an advanced course in psychopathology, or the scientific study of mental disorders. It will focus on conceptual foundations for the study and treatment of major mental disorders as well as the methodological and clinical issues that follow from their consideration. The overall goal of the course is to promote critical thinking and to foster the development of clinical scientists who will discover new knowledge regarding psychopathology. The course is composed of five sections that are concerned with: (1) the history of psychopathology and training in psychological clinical science, (2) causal models regarding the development of mental disorders, (3) the definition and classification of mental disorders, (4) epidemiology (including considerations regarding culture and gender), (5) descriptive psychopathology (i.e., the phenomenology of perception and cognition, emotion, volition, and personality). Prerequisite: Open only to doctoral students in clinical psychology or by permission of instructor.  
Credit 3 units.

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**L33 Psych 5373 Neural Systems of Behavior and Psychopathology**

This course provides students with a working knowledge of our rapidly evolving understanding of the brain circuits that create order in our social, emotional and cognitive worlds and how disorder within these circuits is associated with a broad range of psychopathology, including depression, anxiety, phobias, PTSD, OCD, addiction, autism, schizophrenia, psychopathy and violence. Prerequisite: Graduate standing in Psychological & Brain Sciences. This course is the graduate level equivalent of 4765: Inside the Disordered Brain.  
Credit 3 units.

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**L33 Psych 5375 Seminar on Cognitive Control and Psychopathology**

This is a weekly seminar in which students will present their own work relevant to Cognitive Control and Psychopathology or a review of published articles relevant to Cognitive Control and Psychopathology. Students will be expected to engage in discussion around the work presented. PREREQ: Graduate standing or permission of the instructor  
Credit 1 unit.

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**L33 Psych 538 Theories and Techniques of Psychotherapy**

An introduction to basic concepts and important theoretical views of psychotherapy. Attention is paid to such aspects of the psychotherapeutic process as initiating psychotherapy, client variables, the requisites of the psychotherapist, problems encountered during the process of psychotherapy, issues of termination, and the efficacy of psychotherapeutic intervention. Open to advanced doctoral students in clinical psychology, and to doctoral students in counseling psychology and social work by permission of instructor.  
Credit 3 units.

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**L33 Psych 539 Seminar in Psychotherapy**

Credit 3 units.

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**L33 Psych 540 Advanced Seminar in Clinical Psychology: Ethical & Professional Issues**

This course will highlight the ethical and legal issues facing contemporary practice and research in Clinical Psychology. Representative topics include a major focus on sensitivity to cultural diversity, ethical issues in the practice of clinical psychology such as managed care, suicide intervention and management, legal considerations in the practice of clinical psychology and reviews of new technologies used in the delivery of psychological services. Prerequisite: Advanced doctoral clinical psychology students; graduate students in related disciplines with permission of instructor.  
Credit 3 units.

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**L33 Psych 540S Seminar in Research Ethics**

This is an in-depth review and discussion of common ethical concerns encountered in research, including the use of human and animal participants; informed consent; the Belmont report; the role of the Institutional Review Board; protection of special populations; deception in research; duty to refer; various forms of conflict of interest; issues of data ownership and sharing; bias and fraud in data collection, analysis, and reporting; conflicts surrounding authorship; concerns about duplicate or fragmented publication; understanding and preventing plagiarism; and the reporting of the misconduct of others. Prerequisite: Graduate standing in Psychological & Brain Sciences.  
Credit 1 unit.

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**L33 Psych 540A Advanced Seminar in Clinical Psychology: Personality and Psychopathology**

This graduate level seminar is intended to provide advanced coverage of personality pathology, broadly defined. It will focus on the theoretical issues related to normal personality and its development as well as description of various approaches to the classification of personality disorders. Emphasis will be placed on current research and scientific methods that can be used to advance knowledge of this type of mental disorder. Prereq: Abnormal Psychology, Personality Psychology, and graduate standing.  
Credit 3 units.

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**L33 Psych 542 Seminar in Psychological Measurements**

Credit 3 units.

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**L33 Psych 5427 Social Gerontology**

This course provides an introduction to aging and growing old, from an interdisciplinary perspective. Specific attention is paid to demographics, physical health and illness, mental health, interpersonal relations, work issues, living arrangements, ethics, and death and dying. PREREQ: Junior or Senior standing and completion of 6 advanced units in Psychology.  
Same as L33 Psych 427  
Credit 3 units. A&S IQ: SSC Arch: SSC Art: SSC EN: S

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**L33 Psych 544 Empirically Supported Treatment in the Clinic**

Intro to emotional disorders and their effective treatment in adults. This course combines didactic materials, practice sessions in class, and examples from supervision of some members of the class. The student will learn to assess and treat common problems in the outpatient clinic with empirically supported procedures, understand the theories behind these procedures, and be exposed to the process of applying the procedures in the clinic. PREREQ: Graduate standing in Psychological & Brain Sciences; completion of an introductory course in psychotherapy or permission of instructor.  
Credit 3 units.

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**L33 Psych 545 Clinical Science: Introduction to Intervention**

Introduction to basic concepts and theoretical views of psychotherapy, with attention to aspects of the psychotherapeutic process such as initiating psychotherapy, interviewing techniques, assessment of client variables, and typical problems encountered. Will be focused on evidenced-based treatment interventions and a range of empirically-supported techniques. Prereq: Open to advanced clinical doctoral students or permission of instructor.  
Credit 3 units.

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**L33 Psych 5451 Treatment of Anxiety Disorders with Empirically Supported Interventions**

Introduction to anxiety disorders and their effective treatment in adults. This course combines didactic materials and practice sessions in class. The student will learn to assess and treat anxiety disorders with empirically supported procedures, understand the theories behind these procedures, and have a working knowledge of newer approaches and their accompanying theories.  
Credit 3 units.

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**L33 Psych 5453 Introduction to Affective Science**

The complexity and significance of emotions make their study particularly exciting and challenging. Emotions both shape and are shaped by our subjective experiences, physiology, behaviors, cognitions, social interactions, and health. This course offers an overview of theory and research on emotion with content stretching across psychological disciplines, including personality, social, clinical, developmental, and neuropsychology. Course content will include definitions of emotion, physiological changes associated with emotion, and individual differences in emotional experience. The course will also examine how culture, cognitions, and relationships affect and are affected by emotion and how emotion is related to physical and mental health. PREREQ: Graduate standing.  
Credit 3 units.

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**L33 Psych 546 Seminar in Psychotherapy: Behavior Therapy**

Credit 3 units.

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**L33 Psych 5461 Interventions I**

Introduction to basic concepts and theoretical views of psychotherapy with attention to aspects of the psychotherapeutic process such as initiating psychotherapy, interviewing techniques, assessment of client variables and typical problems encountered. Will be focused on evidenced-based treatment interventions and a range of empirically supported techniques. PREREQUISITES: OPEN TO ADVANCED CLINICAL DOCTORAL STUDENTS OR PERMISSION OF INSTRUCTOR.  
Credit 3 units.

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**L33 Psych 5463 Interventions II: Aging**

Individual, group, marital, family, and systems interventions as applicable to older adults. Emphasis is on the implementation and evaluation of these interventions in both clinical and research contexts. PREREQ: Graduate student status.  
Credit 3 units.

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**L33 Psych 5465 Interventions II: Neuropsychology**

An introduction to the assessment of a broad range of neuropsychological abilities such as memory, attention, and language will be provided. Students gain experience in the administration, scoring, and reporting of results from standard assessment tools. Intervention techniques will be examined with a focus on the maximization of identified strengths and the rehabilitation of identified weaknesses. Selected neuropsychological syndromes will provide

models for the implementation of assessment and intervention strategies. PREREQ: OPEN TO CLINICAL PSYCHOLOGY GRADUATE STUDENTS AND OTHER ADVANCED GRADUATE STUDENTS WITH PERMISSION OF THE INSTRUCTOR. 3 units  
Credit 3 units.

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**L33 Psych 5467 Interventions II: Health Psychology**

Reviews the research basis and key skills of clinical and selected preventive interventions in health psychology. Emphasis interaction of biological and behavioral factors in prevention and illness. Topics covered include risk factor modification, management of chronic disease, psychological factors that complicate diseases such as depression, and psychological and related interventions to enhance quality of life. PREREQ: Interventions I or permission of the Instructor.  
Credit 3 units.

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**L33 Psych 547 Seminar in Psychotherapy: Child and Family Psychotherapy**

Credit 3 units.

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**L33 Psych 5471 Seminar in Psychotherapy**

Credit 3 units.

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**L33 Psych 549 Seminar in Spatial Orientation**

Credit 3 units.

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**L33 Psych 550 Sensory Processes**

Credit 3 units.

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**L33 Psych 5505 Seeing**

Focuses on psychological mechanisms underlying visual perception. Topics include object recognition, visual attention, and the perception of shape, color, form and motion. These processes will be examined through a combination of readings from textbooks and journal articles, and through class discussions. Prerequisite: Graduate standing or permission of instructor.  
Credit 3 units.

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**L33 Psych 5508 Speech Perception and Spoken Word Recognition**

This course is concerned with how human listeners perceive speech and recognize spoken words. In the first part of this course, we will review and critically evaluate what is currently known about the process of translating acoustic-phonetic signals into speech sounds. In the second part of the course, we will consider several different models of spoken word recognition. Here we will be concerned with critically analyzing most of the current models of how acoustic-phonetic information is used to access the mental lexicon. In addition, the course will examine spoken language processing in several different populations, including children and older adults, as another methodology for gaining leverage on understanding spoken word recognition. Prerequisite: Graduate standing of Permission of Instructor.  
Credit 3 units.

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**L33 Psych 552 Seminar in Current Topics in Neuropsychology**

Credit 3 units.

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**L33 Psych 5520 Introduction to Neuropsychology**

This course covers localization theory, consequences of specific brain injuries, factors that can affect the response to brain damage, neuroplasticity, and theories of recovery of function. Prerequisite: A course in physiological psychology.  
Credit 3 units.

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**L33 Psych 5522 Neuropsychological Assessment**

This course will provide an overview of clinical measures used in assessing neurocognitive function. Assessment of a broad range of abilities will be discussed, primarily within the domains of memory, attention, language, motor, and visuospatial function. The foci of the course will be test administration, test interpretation, communication of results, and discussion of the clinical features of selected neuropsychological syndromes. Prerequisite: Open to clinical graduate students in Psychological & Brain Sciences and other advanced graduate students with permission of the instructor. Credit 3 units.

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**L33 Psych 5523 Neuropsychological Syndromes**

Pathological syndromes associated with brain dysfunction, including the aphasias, right hemisphere and frontal lobe syndromes, and the dementias. Clinical features and neuropathology of each syndrome presented. Prerequisite: Graduate standing in psychology or related field with permission of instructor. Background in basic neuroanatomy and neuropsychology assessment recommended. Credit 3 units.

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**L33 Psych 5524 Life Span Neuropsychology**

Course will cover cognitive, motor, and affective changes that are associated with normal and pathological conditions across the lifespan, with a particular emphasis on neuropsychological disorders. Neuroanatomical and neurochemical correlates will also be discussed. Open to advanced graduate students in psychology and related fields. PREREQUISITE, Psych 552 or permission of instructor. Credit 3 units.

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**L33 Psych 5525 Intelligence Across the Life Span**

Theories and frameworks used to understand the construct of intelligence will be covered. Topics will include age-related changes in cognition from childhood through late adulthood, crystallized versus fluid intelligence, general versus specific abilities, and discussion of the many controversies surrounding the measurement and interpretation of the construct of intelligence. PREREQS: Graduate student standing. Credit 3 units.

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**L33 Psych 553 Seminar in Advanced Topics in Vision and Perception**

Credit 3 units.

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**L33 Psych 5535 Events, Time, Plans, and Goals**

This seminar will survey current research on event perception and cognition. We will consider data from development, perception, narrative comprehension, neuropsychology, and functional imaging. Theoretical approaches include event schemas, intentionality theory and dynamical systems. The primary goal is to critically evaluate contemporary approaches to mental representations of temporally structured phenomena. Prerequisite: Graduate Standing or Consent of Instructor. Credit 3 units.

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**L33 Psych 554 Seminar: Sensory Psychology and Psychophysics**

Credit 3 units.

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**L33 Psych 556 Seminar in Cognitive Development**

Credit 3 units.

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**L33 Psych 5565 Topics in Spatial Cognition**

People use spatial knowledge to plan action, navigate, and reason about abstract domains. This seminar will examine representations of space in the brain, the mind, and the world, and the processes that operate on these representations. Topics will include: formation and transformation of mental images, spatial updating with and without vision, navigation, and use of external spatial representations in reasoning. We will discuss data from cognitive psychology, neuropsychology, and neurophysiology. The primary goal is to critically evaluate contemporary approaches to spatial cognition. Prerequisite: Graduate standing or instructor's permission. Credit 3 units.

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**L33 Psych 558 Activation vs. Inhibitory Processes in Cognition and Social Behavior**

Over the past 5 years, cognitive as well as social psychologists have shown a growing interest in the dual processes of activation and inhibition. For example, activation and inhibition have been key constructs in understanding aspects of attention, language and memory. In addition, these processes have been recognized as playing important roles in stereotyping, in that people sometimes rely on category-based knowledge as a basis for judgment, but in other settings they actively attempt to avoid using such information. We shall discuss readings from the cognitive as well as the social literature that have considered how expression vs. suppression processes play a role in these and other related aspects of human information processing. Credit 3 units.

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**L33 Psych 559 Applied Neuropsychology**

Credit 3 units.

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**L33 Psych 5593 Psychology of the Good Life**

What is the good life, and how can people achieve it? This discussion-based seminar class explores two aspects of the "good life": (1) "good" for oneself (living a personally fulfilled life), and (2) "good" for others (living an ethical life, being a good person). We will consider how psychological science can be used to conceptualize, uncover the causes of, and promote well-being for oneself and for others. There will be a particular focus on the ways in which these two aspects of the good life are in alignment or in conflict with each other. Classes will focus on critically evaluating research and integrating and connecting the weekly readings to students' personal research interests and lives, primarily through student-led discussions. PRE-REQ: Graduate Standing. Credit 3 units.

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**L33 Psych 5599 Human Evolutionary Psychology**

How did evolution by natural selection shape the way human beings think and behave? Does evolution explain human cooperation and friendship, human morality, reproductive decisions and social interactions? What sex differences in cognition or behavior are caused by evolution? This course introduces the concepts and findings of evolutionary psychology, mostly through reading of primary sources--articles from psychology and biology journals--and discussion and presentation of empirical cases. PREREQ: At least 6 units of upper-level, home-based Psychology coursework, OR Anthro 3383. Same as L33 Psych 4099. Credit 3 units. A&S IQ: SSC Arch: SSC Art: SSC EN: S

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**L33 Psych 561 Readings in Psychology**

Prerequisite: Permission of the department.  
Credit variable, maximum 3 units.

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**L33 Psych 562 Readings in Psychology**

Credit variable, maximum 3 units.

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**L33 Psych 563 Practicum in Psychotherapy**

Ten hours per week supervised training in psychotherapy and behavior change in an applied clinical setting. Prerequisites: Open to doctoral Clinical Psychology students only.  
Credit 3 units.

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**L33 Psych 5631 Introduction to Computational Cognitive Science**

How does the mind work? Over the last few decades, cognitive psychologists have become increasingly interested in using computational models. These models are designed to describe cognitive processes and the behavior that is produced by them. This computational approach has several advantages. Computational theories of cognition are more specific than verbal theories. Therefore, they do not only afford precisely quantifying certain aspects of cognition, but they also make it possible to simulate cognitive processes. This course provides an introduction to several leading computational methods for understanding cognition, including model fitting and comparison, reinforcement learning, neural networks and Bayesian modeling. These methods will be applied to a wide range of cognitive phenomena, such as short-term memory, reinforcement learning, decision making, cognitive control, concept learning and visual perception. Prerequisites: Psych 100B and Psych 301/3011. Same as L33 Psych 4631  
Credit 3 units. A&S IQ: NSM Arch: NSM Art: NSM BU: BA

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**L33 Psych 564 Practicum in Psychotherapy**

Ten hours per week supervised training in psychotherapy and behavior change in an applied clinical setting. PREREQ: Open to clinical graduate students in Psychological & Brain Sciences only.  
Credit 1 unit.

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**L33 Psych 565 Practicum in Teaching of Psychology**

Credit 2 units.

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**L33 Psych 566 Advanced Analysis of Behavior**

Credit 3 units.

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**L33 Psych 5665 The Science of Behavior**

The primary function of nervous systems is to control behavior. Understanding the links between brain and behavior requires an understanding of cognition—the computations performed by the brain, as well as the algorithms underlying those computations and the physical substrates that implement those algorithms. The goal of this course is to introduce students to the tools, concepts, and techniques for the experimental study of cognition and behavior in humans and nonhuman animals. We will focus on cognitive capacities that are well-developed in humans and can be compared with those of other species, to develop an understanding of how evolution shapes cognition and behavior. Students who complete this course will be able to ask questions and form hypotheses about the computations and algorithms underlying cognition and behavior, and to design experiments that test these hypotheses. PREREQ: Graduate standing or permission of the instructor  
Credit 3 units.

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**L33 Psych 568 Learning Theory**

Credit 3 units.

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**L33 Psych 569 Current Issues in Psychotherapy**

A number of significant issues in the field of psychotherapy will be reviewed and evaluated. Attention will be paid to issues concerning theoretical and procedural differences among important schools of psychotherapy, to commonalities in psychotherapeutic approaches, and to issues concerning efficacy and research efforts in this area. Open to advanced doctoral students in clinical psychology, social work, and counseling psychology who have taken Psych 538 or its equivalent, or by special permission of the instructor.  
Credit 3 units.

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**L33 Psych 578 Seminar in Human Psychophysiology**

Credit 3 units.

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**L33 Psych 581 Seminar: The Psychological Problems of Aging**

Consideration of contemporary topics in the psychology of aging.  
Credit 3 units.

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**L33 Psych 582 Seminar: The Psychological Problems of Aging II**

This advanced seminar focuses on theoretical issues related to age-related psychological changes.  
Credit 3 units.

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**L33 Psych 5831 Biological Foundations of Behavior**

This course would provide a general survey (at the graduate level) of basic scientific information regarding the connection between biological systems and human behavior. In each section, it would review information about the system in question (parts of the brain, neurotransmitters and how they work, hormones, and so on) and then describe what is known about the relation between those systems and various aspects of behavior (cognition, emotion, motivation, and/or psychopathology). The class format will include both lecture and discussion.  
Credit 3 units.

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**L33 Psych 584 Seminar in Neuropsychology**

Credit 3 units.

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**L33 Psych 585 Sem Fund of Gerontology**

Credit 3 units.

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**L33 Psych 586 Current Lit in the Biopsych of Aging**

Credit 3 units.

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**L33 Psych 587 Clinical Psychology of Aging**

Methods of assessing cognitive functioning and personality in older adults. Understanding of the application of the techniques of assessment to older adults not the development of testing skills, is the goal of this course. PREREQ: PSYCH 426 or permission of Instructor.  
Credit 3 units.

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**L33 Psych 588 Clinical Psychology of Aging II**

Individual group, milieu, family, and behavior modification techniques of intervention as applicable to the aged. Familiarization with techniques and research issues is the goal of this course, not development of therapeutic skills. Prerequisite: PSYCH 5461 or permission of instructor.  
Credit 3 units.

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**L33 Psych 5881 Psychology of Aging**

Study of both theory and empirical findings about the processes of aging in terms of brain structure and function, sensation, perception, cognition including learning and memory, intelligence, language, and related topics. PREREQ: Graduate students only.  
Credit 3 units.

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**L33 Psych 5882 Project Building in Aging**

The goal of this course is to help students with an interest in aging research develop the critical thinking skills necessary to develop and implement high quality, interdisciplinary research projects.  
Credit 3 units.

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**L33 Psych 5887 Intervention with Older Adults**

Individual, group, marital, family, and systems interventions as applicable to older adults. Emphasis is on the implementation and evaluation of these interventions in both clinical and research contexts. PREREQ: Graduate standing.  
Credit 3 units.

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**L33 Psych 591 Research in Psychology**

Prerequisite: Permission of the department.  
Credit variable, maximum 9 units.

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**L33 Psych 592 Research in Psychology**

Credit variable, maximum 3 units.

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**L33 Psych 592A Seminar: Theories of Social Psychology**

This course provides broad exposure to the theory and methods of modern social psychology. The focus of the course will be on current theoretical issues in major areas of the field, including social perception, social cognition, attitude change, self and identity, aggression, prosocial behavior, interpersonal relations, and group processes. Prerequisite: Graduate standing in Psychological & Brain Sciences.  
Credit 3 units.

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**L33 Psych 593 Seminar in Social Psychology**

Credit 3 units.

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**L33 Psych 5931 Social Motives and Interpersonal Relations**

This seminar examines individual and interpersonal processes involved in people's reactions to their own life crises as well as the victimization of others. The topics fall under the familiar headings of pro-social behavior, altruism, interpersonal dilemmas, social loafing, social exchange, moral behavior and reactions to victims, adapting to life crises of illness, job loss, and the demands of old age. PREREQUISITE: GRADUATE STANDING IN PSYCHOLOGY OR RELATED FIELD WITH PERMISSION OF THE INSTRUCTOR.  
Credit 3 units.

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**L33 Psych 5951 Psychology of Attitudes**

Covers research and theory on a range of topics in the field of attitudes, including attitude formation and change, the structure of attitudes, and how attitudes function to affect judgments and decisions. Will be conducted at a seminar with emphasis on student discussion of current research. Prerequisite: Graduate standing in psychology; other graduate students with permission of instructor.  
Credit 3 units.

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**L33 Psych 5953 Memory and Attitudes in the Wild: Political Spin, Collective Attitudes and Advertising**

Psychologists have long been interested in the processes that change people's mental representations of their world. For cognitive psychologists, this interest has been mainly dominated by a focus on memory, as seen by decades of work on memory formation and memory change. For social psychologists, their dominant focus has been on attitude formation and change. In both disciplines, however, this research has mostly been conducted in laboratory settings. Although laboratories offer valuable leverage with respect to experimental control, they are often ill-suited to study the very issues that have stimulated our interest in memory and attitudes in the first place! For example, political "spin"--the process by which our leaders attempt to deliberately shape people's opinions about ongoing events--represents a fascinating, but poorly understood, phenomenon which undoubtedly involves an interplay between memory and attitude. In this course, we shall draw from "traditional" as well as nontraditional readings in order to facilitate a greater understanding of these and other provocative aspects of memory and attitudes as they exist in the wild, that is, outside of the familiar confines of our laboratory cubicles. PREREQ: Graduate standing in Psychology  
Credit 3 units.

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**L33 Psych 5955 Memory, Emotion, and Attitudes**

In this graduate seminar, we begin with a core set of principles about human cognition and affect. The events we retrieve from long term memory can evoke emotion, and those emotional reactions can, in turn, influence the formation and/or change of attitudes along with other sorts of belief systems. The considerations surrounding this three part (MEMORY>EMOTION>ATTITUDE) framework are complex and many interesting questions have received little if any empirical attention. For example, retrieving a memory of a threatening event can automatically trigger different types of correlated but distinct negative emotions. These distinct affective states can, in turn, exert different types of effects on different types of social attitudes. Also, the types of memories that are retrieved--and the ways that those memories are processed--can moderate the ways that emotion and attitudes are ultimately influenced. Readings will draw primarily from classic and contemporary work in social and cognitive psychology, although we will also be considering implications for other related areas, such as research and theory on collective memory and political psychology.  
Credit 3 units.

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**L33 Psych 5958 Emotion Regulation**

The purpose of this course is to provide an introduction to the field of emotion regulation. We will discuss theoretical and empirical work on emotion regulation from various areas of psychology, including social, personality, developmental, clinical, and neuroscience. Example topics include definitional issues, goals and strategies, personal and interpersonal consequences, sociocultural influences, life-span development, health and psychopathology. PREREQ: Psych 301.  
Same as L33 Psych 4555  
Credit 3 units. A&S IQ: SSC Arch: SSC Art: SSC EN: S

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**L33 Psych 5991 Social Cognition**

This seminar will focus on current theory and methods in social cognition, broadly defined. The goal of this course, much like the goal of research in social cognition is twofold: 1) to explore the cognitive underpinnings of social psychological phenomena, including person perception, stereotyping, attribution, emotion, automaticity, and self-construction, assessment, and regulation; and 2) to explore the social and contextualized nature of cognitive processes and content, including memory, judgment, and perception. Although the course draws primarily on readings from the social psychological literature, topics discussed are relevant to a variety of domains, including cognitive and clinical psychology. PREREQ, GRADUATE STANDING.

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Credit 3 units.

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**L33 Psych 5993 Selected Topics in Moral Judgement, Ideology, and Social Cognition**

This seminar is generally concerned with a number of phenomena involving moral judgment, ideology, and the intersection of the two. A central premise of the course is that basic processes identified in the social cognition literature (e.g. automatic vs. controlled processes) can be used as a basis for understanding how people make moral judgments and how these judgments may be contingent on the ideological beliefs of the perceiver. Among other topics, we will study the extent to which liberals and conservatives have different criteria as to what is "good" and "right". We will draw heavily from research from a number of different scholars, including but not limited to John Jost, Joshua Greene, Jonathan Haidt, Linda Skitka, David Pizarro, Philip Tetlock, and Jesse Graham. PREREQ: Graduate standing.

Credit 3 units.

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**L33 Psych 5995 Automatic & Controlled Processes**

We will focus on the distinction between automatic and controlled processes and its implication for a variety of cognitive and social psychological phenomena. Instructors will discuss the assigned material during class and students are expected to do the same. Prerequisites: Graduate standing in Psychology or by permission of instructor.

Credit 3 units.

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**L33 Psych 5999 Recent Advances in Psychological Science Seminar Series**

This is a regular seminar series offered in the department of Psychological & Brain Sciences that consists of outside speakers from around the world and country who present in the department colloquium series, as well as additional topics and speakers presented by faculty within the P&BS department. Attendance at this series is required for all graduate students in the department of Psychological & Brain Science. PREREQ: Graduate standing in P&BS.

Credit 1 unit.

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**L33 Psych 885 Masters Nonresident**

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