

# Psychology (PSY)

**Chair:** Nancy K. Squires, Psychology B Room 154, (631) 632-7808

**Graduate Program Director:** Arthur Samuel, Psychology B Room 152, (631) 632-7855

**Graduate Program Coordinator:** Marilynn Wollmuth, Psychology B Room 150, (631) 632-7855

**Web site:** [www.psychology.sunysb.edu](http://www.psychology.sunysb.edu)

**Degrees awarded:** Ph.D. in Biopsychology; Ph.D. in Clinical Psychology; Ph.D. in Cognitive/Experimental Psychology; Ph.D. in Social and Health Psychology

The Department of Psychology, in the College of Arts and Sciences, is one of Stony Brook's largest graduate departments. More than 800 Ph.D. degrees have been awarded since the program began more than 40 years ago. In recent years the population of students has been about 60 percent women, 15 percent students from underrepresented groups, and 10 percent international students.

The Department is administratively organized into four program areas: Biopsychology, Clinical Psychology, Cognitive/Experimental Psychology, and Social and Health Psychology. Students must be admitted to one of these four program areas, but they are encouraged to receive training in more than one program area if appropriate. In conjunction with the Department of Neurobiology and Behavior, Brookhaven National Laboratory, and the Department of Psychiatry, interdisciplinary training is offered in behavioral neuroscience. In conjunction with the Departments of Linguistics and Computer Science, interdisciplinary training is offered in cognitive science. Course offerings and research training are structured in such a way that students can meet the requirements for a Ph.D. degree in Biopsychology, Clinical Psychology, Cognitive/Experimental Psychology, or Social and Health Psychology. Stony Brook's doctoral program in clinical psychology is approved by the American Psychological Association.

A detailed description of the graduate program, including requirements for students in each area of graduate studies, is available from the departmental graduate office or at [www.psychology.sunysb.edu](http://www.psychology.sunysb.edu)

In all four program areas, the primary emphasis is on research training through apprenticeship, advisement, and independent research. New students are encouraged to become involved immediately in ongoing research and to engage in independent research when sufficient skills and knowledge permit, with the

goal of becoming active and original contributors.

## Graduate Training Programs

Faculty in each area maintain active laboratories with state-of-the-art equipment for research and graduate training.

The *Clinical* area research interests of the core faculty center on depressive disorders, anxiety disorders, personality disorders, discord and aggression among couples, romantic competence among adolescents and adults, social problem solving, psychotherapy process and outcome, lesbian/gay/bisexual issues, and autism. Faculty labs are equipped with state-of-the-art facilities including equipment for observational research (e.g., digital cameras and DVDs), psychophysiological equipment (e.g., heart rate, blood pressure, respiratory rate) as well as electrophysiology (EEG, ERP). The clinical area also utilizes a number of other on- and off-campus facilities for clinical research and training, including the Psychological Center, a training, research, and service unit that provides psychological services and consultation to the community as well as a site for graduate practicum and internships. Within the Psychological Center, an Anxiety Disorders Clinic provides assessment and treatment of various anxiety disorders such as obsessive-compulsive disorder and post-traumatic stress disorder. The University Marital Therapy Clinic provides therapy for couples and individuals in the community who are experiencing relationship difficulties. Personnel at the Marital Clinic also provide forensic assessments for child custody and therapeutic visitation for the Supreme and Family Courts of Suffolk County, New York. The Autism Help Center is a private local agency that deals with school and family issues for children with autism and related developmental disabilities. The Developmental Disabilities Institute, another local agency, also offers services for people with a

variety of disabilities. Affiliations have been established with the University's Health Sciences Center, North Shore University Hospital, Long Island Jewish Hillside Hospital, local public schools, an agency for the mentally retarded, and Northport Veteran's Administration Hospital. The Department-sponsored University Preschool enrolls children from 18 months to five years of age, permitting both research and observation.

The *Biopsychology* area research of core faculty spans the fields of behavioral neuroscience, cognitive neuroscience and affective neuroscience, and molecular biology. The breadth of the program allows students to obtain a broad foundation in neuroscience while developing expertise in a focused research program. Faculty interested in animal models study neurodevelopmental disorders such as autism, the role experience plays in shaping neural connections, mediating damage, and behavioral performance, and the role peptides play in memory, attention, and motivation. Faculty studying human subjects are interested in the role of prefrontal cortex in cognitive control mechanisms and working memory, and faculty in affective neuroscience focus on the relationship between personality, genes, and epigenetic regulation of gene expression, and their impact on regional brain activation. Human imaging is conducted on the 3T MRI at Stony Brook University Hospital. Additional facilities are currently being developed through an NSF Instrumentation Grant. Faculty also have individual facilities for molecular biology, transcranial magnetic stimulation, human electrophysiology, and eye-tracking. Overall, there are opportunities for rigorous, sophisticated techniques that are often integrated. For studies in animals, investigators have basic histology facilities, a neuron tracing system, image analysis, and equipment for numerous behavioral tests (operant conditioning, mazes, motor

tasks), and behavioral interventions (pharmacological ICV infusion, exercise, stress, enrichment). There are also multi-user facilities for electron microscopy.

The *Cognitive/Experimental* area offers training in cognitive science in its affiliations with the Departments of Linguistics and Computer Science, and in cognitive neuroscience, in cooperation with the Biopsychology Program. The Language, Mind, and Brain Initiative regularly sponsors interdisciplinary seminars with participation from Psychology, Linguistics, Computer Science, Philosophy, and Biology. Laboratory facilities include a Purkinje eyetracker and several lightweight head-mounted eyetrackers for psycholinguistics and visual cognition studies, rooms equipped to study electronic communication and human-computer interaction, sound-isolated chambers for perception and psycholinguistics experiments, multimedia workstations for presenting stimuli and collecting data, and computer-controlled choice stations for testing human and non-human subjects. Faculty research is particularly strong in language, memory, attention, visual cognition, and perception. Most research programs are funded by agencies such as the National Science Foundation, the National Institutes of Health, and the Army Research Office. Faculty, students, and postdoctoral associates rely primarily on the Department of Psychology's large volunteer pool of human subjects.

The *Social and Health* area faculty have affiliations with the Department of Psychiatry and Behavioral Science and they collaborate with researchers and clinicians in a variety of departments at the Stony Brook School of Medicine and University Hospital. Social and Health facilities include laboratories for studies of attachment, women's health, close relationships, stress and coping, social-cognitive development, prejudice and discrimination, social cognition, social identity, social neuroscience, volunteerism, academic achievement, meta-analysis, and medical decision-making.

## Admission

The requirements for admission to doctoral study, in addition to the minimum Graduate School requirements, ordinarily include:

A. A bachelor's degree with a major in Psychology, or in a program providing

adequate preparation for the intended area of study (ordinarily including statistics, research methodology, and/or psychology laboratory)

B. An average of 3.5 or better in academic undergraduate coursework

C. One official copy of all previous college transcripts, with certified English translations of any transcripts in a foreign language

D. Letters of recommendation from three instructors or academic advisors, and, for applicants to Clinical Psychology, three supplementary recommendations. The Clinical supplemental recommendation form can be found at the Departmental Web site: [www.psychology.sunysb.edu](http://www.psychology.sunysb.edu)

E. The Graduate Record Examination (GRE) General Test (the subject GRE is not required)

F. For international students, TOEFL or IELTS scores (unless their native language is English or they attended college where English was the language of instruction) and the International Student Financial Affidavit

G. Students who do not meet these requirements may also apply if they feel that special circumstances should be considered

H. Acceptance by the Department and Graduate School

The deadline for receipt of applications and all supporting materials for fall admission is December 15. Applications must be submitted online. Links to the online application system are on the department Web site at [www.psychology.sunysb.edu](http://www.psychology.sunysb.edu)

## Faculty

### Distinguished Professors

Goldfried, Marvin, Ph.D., 1961, University at Buffalo: Lesbian, gay, and bisexual issues; psychotherapy process research; cognitive behavior therapy; delineation of common therapeutic principles across theoretical orientations. Clinical Program

O'Leary, K. Daniel, *Director of Clinical Training*, Ph.D., 1967, University of Illinois: Etiology and treatment of marital discord and spouse abuse; physical aggression in intimate relationships; the effects of marital discord on partner depression; memory for interpersonal events; Clinical Program.

Rachlin, Howard, *Emeritus*, Ph.D., 1965, Harvard University: Choice, decision making,

behavioral economics, self-control, addiction, gambling, and time allocation in humans and other animals; Cognitive/Experimental Program.

### Professors

Aron, Arthur, Ph.D., 1970, University of Toronto, Canada: Motivation and cognition in close relationships; intergroup relations; social neuroscience; Social and Health Program.

Carr, Edward G., Ph.D., 1973, University of California, San Diego: Autism; developmental disabilities; applied behavior analysis; positive behavior support with families and schools; Clinical Program, Social and Health Program.

D'Zurilla, Thomas J., *Emeritus*, Ph.D., 1964, University of Illinois: Social problem solving; problem-solving therapy; prevention problem-solving training; Clinical Program.

Gerrig, Richard, Ph.D., 1984, Stanford University: Psycholinguistics; text understanding and representation; nonconventional language; cognitive experiences of narrative worlds; Cognitive/Experimental Program.

Klein, Daniel N., Ph.D., 1983, University at Buffalo: Psychopathology; mood disorders; assessment, classification, course, development, familial transmission, and treatment of depression; child temperament and personality development; Clinical Program.

Levine, Marvin, *Emeritus*, Ph.D., 1959, University of Wisconsin: Problem solving, especially heuristics, and the use of spatial information; comparison of Buddhist and Western views of human nature; Clinical Program.

O'Leary, Susan G., Ph.D., 1972, Stony Brook University: Theoretical and applied research on discipline practices in the home; prevention and early intervention vis-a-vis oppositional and conduct-disordered children; Clinical Program.

Rajaram, Suparna, Ph.D., 1991, Rice University: Human memory and amnesia; implicit and explicit memory distinctions; new learning in amnesia; priming, social influences on individual memory; experimental investigation of remembering and knowing the past. Cognitive/Experimental Program.

Samuel, Arthur, *Graduate Program Director*, Ph.D., 1979, University of California, San Diego: Perception, psycholinguistics, and attention; perception of speech as a domain of study in cognitive psychology; spatial and temporal properties of visual attention; Cognitive/Experimental Program.

Squires, Nancy K., *Chair*, Ph.D., 1972, University of California, San Diego: Neuropsychology; neurophysiological measures of sensory and cognitive functions of the human brain, both in normal and clinical populations; Biopsychology Program.

Waters, Everett, Ph.D., 1977, University of Minnesota: Social and personality development; parent-child and adult-adult attachment relationships; Social and Health Program.

Waters, Harriet Salatas, Ph.D., 1976, University of Minnesota: Cognitive development (comprehension and production of prose; memory and problem solving) and social cognition (mental representations of early social experience, co-construction and socialization processes); Social and Health Program.

Whitaker-Azmitia, Patricia, *Undergraduate Program Director*, Ph.D., 1979, University of Toronto: Animal models of autism and Down syndrome; serotonin and its role in brain development; Biopsychology Program.

Wortman, Camille, Ph.D., 1972, Duke University: Reactions to stressful life experiences; the role of social support and coping strategies in ameliorating the impact of life stress; predictors of good psychological adjustment among those who experience major losses, including bereavement and serious injury; others' reactions to those who experience life crisis; Social and Health Program.

### Associate Professors

Anderson, Brenda J., *Head, Biopsychology*, Ph.D., 1993, University of Illinois: Rodent models of the effects of exercise and stress on brain structure, metabolism, and function; Biopsychology Program.

Brennan, Susan E., Ph.D., 1990, Stanford University: Language production and comprehension; speech disfluencies; human/computer interaction; computational linguistics; eye gaze as a measure of language processing and as a cue in conversation; Cognitive/Experimental Program.

Canli, Turhan, Ph.D., 1993, Yale University: The genetic and neural basis of personality and emotion; Biopsychology Program.

Davila, Joanne, Ph.D., 1993, University of California, Los Angeles: Interpersonal functioning and psychopathology; depression; maladaptive personality styles; close relationships; attachment processes; Clinical Program.

Franklin, Nancy, *Head, Cognitive/Experimental Area*, Ph.D., 1989, Stanford University: Human memory; source monitoring; spatial cognition; mental models; Cognitive/Experimental Program.

Levy, Sheri, Ph.D., 1998, Columbia University: Ideologies and lay theories; intergroup relations; prejudice reduction; volunteerism; Social and Health Program.

Lobel, Marci, Ph.D., *Head, Social and Health*, 1989, University of California, Los Angeles: Stress, coping, and physical health; psychosocial factors in women's reproductive health; social comparison processes; Social and Health Program.

Robinson, John, Ph.D., 1991, University of New Hampshire: Behavioral neuroscience; Biopsychology Program.

Zelinsky, Gregory, Ph.D., 1994, Brown University: Attention and eye movements during visual search and visual working memory tasks; Cognitive/Experimental Program.

### Assistant Professors

Freitas, Antonio L., Ph.D., 2002, Yale University: Social cognition; motivation; self-regulation; Social and Health Program.

Hajcak, Greg, Ph.D., 2006, University of Delaware: Psychophysiology, emotion, cognition; anxiety disorders and their treatment; Clinical Program.

Klonsky, E. David, Ph.D., 2005, University of Virginia: Self-injurious behaviors; borderline personality disorder; emotion and psychopathology; measurement of personality and psychopathology; Clinical Program.

Leung, Hoi-Chung, Ph.D., 1997, Northwestern University: Prefrontal and parietal function in human cognition; neural mechanisms underlying spatial information processing and eye movement control; fMRI applications in cognitive neuroscience; Biopsychology Program.

London, Bonita, Ph.D., 2006, Columbia University: Social identity and intergroup processes; stereotyping and prejudice; academic achievement; Social and Health Program.

Moyer, Anne, Ph.D., 1995, Yale University: Psychosocial issues surrounding cancer risk; research synthesis and research methodology; Social and Health Program.

### Lecturer

Kuchner, Joan, Ph.D., 1981, University of Chicago: Child and family studies; child development; social policy, children's environments.

### Research Faculty

Heyman, Richard, *Professor*, Ph.D., 1992, University of Oregon: Escalation and de-escalation of family conflict; observation of couples; defining and assessing family maltreatment; innovative approaches to prevalence estimation of secretive problems (family maltreatment, substance abuse, suicidality); community-based prevention of secretive problems; clinical assessment and treatment of relationship dissatisfaction and partner abuse; Clinical Program.

Slep, Amy Smith, *Associate Professor*, Ph.D., 1995, Stony Brook University: Affect regulation in parent-child and marital dyads; etiology of parental and partner aggression/abuse; connections between parenting and marital functioning; Clinical Program.

Vivian, Dina, *Associate Professor*, Ph.D., 1986, Stony Brook University: Marital therapy; communication skills in maritally discordant couples; communication and problem solving in physically abusive couples; cognitive and affective processes in physically abusive and maritally discordant couples; Clinical Program.

### Joint and Associated Faculty

Biegon, Anat, *Senior Scientist, Medical Department, Brookhaven National Laboratory*, Ph.D., 1980, Weizmann Institute of Science, Israel: Brain response to traumatic, ischemic, or inflammatory insults; Biopsychology Program.

Crowell, Judith A., *Professor, Psychiatry: Child and Adolescent Psychiatry*, M.D., 1978, University of Vermont: the attachment system across the life span; parent-child and adult-adult interactions; Social and Health Program.

Evinger, Leslie Craig, Ph.D., 1978, University of Washington: Motor control and learning: movement disorders; Biopsychology Program.

Fischel, Janet, *Professor, Pediatrics*, Ph.D., 1978, Stony Brook University: Behavioral and developmental pediatrics; developmental language disorders and emergent literacy skills; psychological management of disorders of elimination; Clinical Program.

Goldstein, Rita Z., *Assistant Scientist*, Ph.D., 1999, University of Miami: Neuroimaging (fMRI, PET, ERP); neuropsychology (reward processing/saliency attribution, inhibitory control, and extinction); drug addiction (comorbidity with depression, PTSD, aggression, anger); Biopsychology Program.

Huffman, Marie K., Ph.D., 1989, University of California, Los Angeles: Phonetics: phonology; Cognitive/Experimental Program.

Kritzer, Mary, *Associate Professor, Neurobiology and Behavior*, Ph.D., Yale University, 1989: Gonadal hormone influence over function and dysfunction in the cerebral cortex; Biopsychology Program.

Krupp, Lauren, *Associate Professor, Neurology*, M.D., 1981, Albert Einstein College of Medicine: Neuropsychological and neurobehavioral characteristics of chronic mental illness; interrelationship between memory performance and mood disturbance in chronic fatigue syndrome, Lyme disease, and multiple sclerosis; Biopsychology Program.

Kotov, Roman, *Research Assistant Professor, Department of Psychiatry: Psychiatric Epidemiology*, Ph.D., 2006, University of Iowa: Classification of mental illness; relationships between personality and psychopathology; clinical assessment; Clinical Program.

Lavine, Howard, Ph.D., 1994, University of Minnesota: Political psychology; cognition; Social and Health Program.

London, Manuel, *Professor, College of Business and Center for Human Resource Management*, Ph.D. 1974, Ohio State University: Organizational psychology; person perception applied to performance ratings, feedback, and performance management systems; group learning and team development; dispositional factors affecting involvement in social advocacy; Social and Health Program.

Maczaj, Marta, M.D., 1989, Stony Brook University: *Director, Sleep Disorders Center, University Hospital*; Biopsychology Program.

Morin, Lawrence P., *Professor, Psychiatry*, Ph.D., 1974, Rutgers University, Institute of Animal Behavior: Biological rhythms; environment and reproduction; endocrine system and behavior; Biopsychology Program.

Sprafkin, Joyce, *Associate Professor, Psychiatry*, Ph.D., 1975, Stony Brook University: Child psychopathology; ADHD; tic disorders; effects of television on child behavior; Clinical Psychology Program.

Stent, Amanda J., *Assistant Professor, Computer Science-Cognitive/Experimental*, Ph.D., 2001, University of Rochester: Spoken and multimodal dialogue systems; natural language generation; theories of discourse; information extraction; Cognitive/Experimental Program.

Stone, Arthur, *Professor, Psychiatry*, Ph.D., 1978, Stony Brook University: Stress, coping, and illness; immune system functioning and health; Clinical Program, Social and Health Program.

Thanos, Peter, *Staff Scientist, Laboratory for Neuroimaging, Brookhaven National Lab*, Ph.D., Eastern Virginia Medical School, 1997: Addiction, including alcohol, drug abuse, and obesity; Biopsychology Program.

### Adjunct Faculty

Burkhard, Barbara, *Assistant Professor and Director, Child Treatment Program, North Suffolk Center*, Ph.D., 1976, Stony Brook University: Child abuse and neglect.

Peterson, Anne, *Professor and Associate Director, University Counseling Center*, Ph.D., 1980, Ohio University: Psychopathology, assessment, psychodynamic psychotherapy, women's issues, couple's therapy, and multicultural issues.

Sternglanz, Sarah, *Assistant Professor, Social Sciences Interdisciplinary Program*, Ph.D., 1973, Stanford University: Human ethology; sex roles; social learning theory; female academic and career success.

## Degree Requirements

The receipt of the Ph.D. signifies both a scholarly mastery of the field of psychology and the ability to conduct independent research. In addition to the Graduate School's degree requirements, students must satisfy the following requirements (as well as requirements of their area of studies):

### A. Course Requirements

A student must maintain a graduate G.P.A. of at least 3.0 and successfully complete an approved program of study with a grade of at least B in each required course. Two semesters of quantitative methods and three breadth courses selected outside the student's area of graduate studies are required. In addition, two semesters of First-Year Lectures (no credit) and two semesters of a practicum in statistical computer applications are required. The four training areas of the Department have additional course requirements. Following admission,

students with graduate training elsewhere can petition to satisfy course requirements on the basis of their previous graduate work. No more than three Departmental course requirements will be waived. Petition to waive requirements or to satisfy them on the basis of previous graduate work should be directed to the Graduate Office. Petitions concerning area requirements should be addressed to the student's area head.

### B. Yearly Evaluation

The progress of each graduate student is reviewed at the end of each academic year by the student's area's faculty. This provides opportunities for both positive feedback about the student's achievements and constructive feedback for improving or accelerating the student's progress. We expect that all students admitted to the Ph.D. program have the potential to succeed; however, any student whose performance is below the standards established by the Department and the area may be dismissed or asked to withdraw. Under certain circumstances a student may be permitted to obtain a terminal Master of Arts degree, satisfactorily completing the required courses and 30 graduate credit hours of study, and writing a second-year research paper.

### C. Second-Year Paper

At the end of the second year of study, each student must submit an original research paper to the advisor and the area head. Although the form of this paper and the date it is due varies by area, all second-year papers must include data collection and analysis. The second-year paper must be approved prior to the specialties paper (see item E). A copy of the approved paper must be provided to the Psychology Graduate Office.

### D. M.A. Degree in the Course of Doctoral Studies

The Department will recommend granting an M.A. degree to students who have successfully completed the second-year requirements, including the second-year research paper; upon the recommendation of the faculty in the student's area of graduate studies. This process is not automatic; students wishing to obtain an M.A. degree must file for one.

### E. Specialties Paper and Examination

This requirement should be completed by the end of the sixth semester of

study. The specialties paper is a review/research paper suitable for submission to a refereed journal. The paper must be presented to and defended before a committee. The form of the specialties paper depends upon the student's area of graduate studies, but all areas require its completion by the end of the third year in order for a student to be considered to be on track.

### F. Advancement to Candidacy

After successful completion of the specialties paper and examination, all required coursework, two SDI courses (see G), and the requirements of the student's area of studies, a majority vote of the faculty of the student's area is required to recommend advancement to candidacy for the Ph.D. The Graduate School requires that students must advance to candidacy at least one year before defending their dissertations.

### G. Research and Teaching

All four graduate training areas focus heavily on research; research activity from the time of admission through the fourth year is required. Students who are funded on state lines serve as teaching assistants (TAs) for classes taught by departmental faculty and instructors.

For all students, regardless of source of funding, two semesters of substantial direct instruction (SDI) in the classroom or laboratory is required (one of which must be PSY 310). Students may satisfy this requirement by providing significant hours of lecturing and student contact in a class for which they are serving as a TA, or by serving as the instructor of record for a class of their own. During these semesters, graduate students must receive teaching evaluations from their students.

### H. Residence

Minimum residence of two years and the equivalent of three years of full-time graduate study are ordinarily required. Unless admitted as part-time students (which happens very rarely), residents must register for full-time study until they are advanced to candidacy. Full-time study is 12 credits during the first year and nine thereafter.

### I. Dissertation

The approval of the dissertation proposal and successful oral defense of the completed dissertation are required.

### Within Area Course Requirements

In addition to satisfying Graduate School and Departmental degree requirements, students must satisfy all of the course requirements of their training programs.

#### Biopsychology

Complete the following courses (required of all Biopsychology area students):

- PSY 561 Cognitive and Behavioral Neuroscience I
- PSY 562 Cognitive and Behavioral Neuroscience II

Complete at least two of the following courses:

- PSY 560 Neuropsychology
- PSY 564 Neuropsychopharmacology
- PSY 620 Seminars in Selected Topics: Affective Neuroscience
- PSY 620 Seminars in Selected Topics: Cognitive Neuroscience

Sign up for the following sequence each year (required of all Biopsychology area students):

- PSY 581 Cognitive and Behavioral Neuroscience Colloquium I
- PSY 582 Cognitive and Behavioral Neuroscience Colloquium II

#### Clinical Psychology

Complete the following courses in the first year (required of all Clinical area students):

- PSY 534 Assessment: General Principles, Clinical Interviews, and Adult Psychopathology
- PSY 602 Assessment: Personality Testing, Intellectual/Cognitive Testing, and Child/Parent Assessment
- PSY 537 Methods of Intervention: Treatment of Internalizing Disorders
- PSY 538 Methods of Intervention: Treatment of Externalizing Disorders and Relationship Problems
- PSY 545 Psychopathology: Conceptual Models and Internalizing Disorders
- PSY 596 Psychopathology: Externalizing and Psychotic Disorders
- PSY 603 Ethics and Professional Issues

Complete the following courses in the second year (required of all Clinical area students):

- PSY 535 Advanced Research Methods
- PSY 604 Intervention Practicum
- PSY 605 Advanced Clinical Practicum

- PSY 606 Supervised Practice
- PSY Breadth Course 1

Complete the following courses in the third year:

- PSY 533 Principles Applicable to Clinical Psychology: Historical and Systemic Perspectives
- PSY 606 Supervised Practice (Fall and Spring)
- PSY Breadth Course 2
- PSY Breadth Course 3
- PSY 698 Research (Fall and Spring)

Complete dissertation (PSY 699) during the fourth year and complete internship (PSY 608) in the fifth year.

#### Cognitive/Experimental Psychology

Complete three of the following:

- PSY 513 Attention and Thought
- PSY 514 Sensation and Perception
- PSY 518 Memory
- PSY 520 Psycholinguistics
- PSY 610 Seminars in Selected Topics: Cognition

Sign up for the following sequence each year (required of all students):

- PSY 583 Experimental Colloquium I
- PSY 584 Experimental Colloquium II

The Cognitive/Experimental Area also requires submission of a First-Year Research Paper requiring data collection and analysis. This paper must be submitted to the advisor and area head at the end of the second semester of graduate study.

#### Social and Health Psychology

Complete two of the following courses:

- PSY 541 Social Psychology of Close Relationships
- PSY 543 Attachment
- PSY 544 Emotions and Cognition
- PSY 549 Prejudice and Discrimination
- PSY 555 Social Psychology
- PSY 558 Theories of Social Psychology: Health Applications
- PSY 559 Psychology of Women's Health

Complete an additional special topics course in the Social and Health area (PSY 610 or PSY 620). Alternatively, students can complete an additional course from the preceding category.

Students must complete one of the quantitative courses listed below or an additional methods or statistics course as approved by the student's advisor or

area head. These quantitative courses count toward the Department's breadth requirement.

- PSY 505 Structural Equation Modeling and Advanced Multivariate Methods
- PSY 506 Psychometrics
- PSY 535 Advanced Research Methods
- PSY 610 Seminars in Selected Topics: Meta-Analysis

### Courses

#### PSY 501 Analysis of Variance and Experimental Design

The design and analysis of factorial experiments having a single dependent variable. Topics include between- and within-subjects designs, mixed-factor designs, interactions, trend analysis, and planned comparisons. Emphasis on applications in psychological research. Required of all Ph.D. students in psychology.

Prerequisite: Undergraduate statistics

Co-requisite: PSY 508

Fall, 3 credits, ABCF grading

#### PSY 502 Correlation and Regression

Correlation, regression, multiple correlation, multiple regression, partial correlation, and introductions to some of the following topics: factor analysis, mediational analysis, structural equation modeling, relation of regression to analysis of variance, analysis of covariance, discriminant function analysis, and multivariate analysis of variance. Required of all Ph.D. students in psychology.

Co-requisite: PSY 508

Spring, 3 credits, ABCF grading

#### PSY 504 First-Year Lectures

Presentation and discussion of current research progress and interests. Required of all first-year Ph.D. students.

Fall and spring, 0 credit, S/U grading

#### PSY 505 Structural Equation Modeling and Advanced Multivariate Methods

Thorough coverage of structural equation modeling and brief coverage of other specialized techniques used in data analysis in psychology, such as multi-level modeling and cluster analysis (topics for brief coverage vary from year to year). The course emphasizes hands-on work with real data sets, using standard statistical software packages.

Spring, 3 credits, ABCF grading

#### PSY 506 Psychometric Methods

This course surveys traditional and evolving views on item design, reliability, and validity, reviews statistical methods related to test construction, and applies this material to the design and evaluation of observational, rating, and self report measures in domains of interest to psychologists. The course also examines the impact of test characteristics on data analysis and the role of test design in theory construction.

Fall or spring, alternate years, 3 credits, ABCF grading

**PSY 508 Introduction to Computer Applications in Statistics**

Computer protocol and introduction to statistical packages and necessary utility programs. *Pre- or Co-requisite: PSY 501 or 502*  
*Fall and spring, 0-1 credits, S/U grading*  
*May be repeated for credit*

**PSY 510 History of Psychology**

Intensive reading in the history of psychology from original sources. Emphasis is on class discussion and relation to modern problems.  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 511 Learning**

A consideration of the basic principles of learning. Analysis of the leading theories of learning as well as areas of controversy and dispute.  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 513 Theories of Attention**

This course covers some of the major theoretical perspectives that have shaped the attention literature, starting with historical distinctions of early versus late selection and ending with more contemporary mathematical, neurophysiological, and neurocomputational theories. Specific questions will include: "What is attention?" (Is it a unitary thing or a grab-bag of assorted processes?), "How does it work?," and "What paradigms have researchers used to study attention?" (dichotic listening, priming, search, etc.).  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 514 Sensation and Perception**

This course covers the theory and research that change physical stimuli (e.g., a picture of your friend) into neural information, the major brain areas involved in processing this sensory information for various perceptual abilities (e.g., motion perception, color perception, object perception, etc.), and the different theoretical approaches to analyzing a given perceptual phenomenon.  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 518 Memory**

Review of theory and phenomena related to human memory. Topics include representation of schemas and categories, encoding, forgetting, implicit learning, and memory for procedures. Several recent models of long-term memory representation are discussed and compared.  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 520 Psycholinguistics**

The psychology of language, including the mental lexicon, sentence processing, pragmatics, discourse, production and comprehension of utterances in conversation, language and thought, first-language acquisition, and computational approaches.  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 524 Cognitive Development**

This course presents the developmental perspective as applied to human cognition. Topics

include (1) characteristics and constraints on cognitive abilities in infancy, childhood, and adolescence; (2) mechanisms of developmental change; and (3) links between cognitive development and selected applied topics.

*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 533 Principles Applicable to Clinical Psychology: Historical/Systemic Perspectives**

A critical review of how principles of general psychology apply to clinical psychology. The course material will be discussed within the context of the history of ideas and major systems of thought as they relate to conceptualization, assessment, and intervention.

*Prerequisite: Psychology doctoral student*  
*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 534 Assessment: General Principles, Clinical Interviews, and Adult Psychotherapy**

General principles of assessment; clinical interviewing; structured interviews for assessing axis-I and axis-II psychopathology; ethics and cultural diversity.

*Prerequisite: Clinical psychology doctoral student*  
*Fall, 2 credits, ABCF grading*

**PSY 535 Advanced Research Methods**

Advanced research methods employed in clinical, personality, social, and behavioral research.  
*Prerequisites: PSY 501, 502; clinical doctoral student*  
*Fall or spring, 3 credits, ABCF grading*

**PSY 537 Methods of Intervention: Treatment of Internalizing Disorders**

This course covers the theory and research associated with the treatment of internalizing disorders of adults, adolescents, and children. Among the topics covered are the treatment of phobias, school refusal, panic disorder, general anxiety disorder, social anxiety, post-traumatic stress disorder, complicated grief, obsessive compulsive disorder, and mood disorders. In the treatment of each, particular emphasis is placed on how therapy needs to be modified depending on whether one is working with a child, adolescent, or adult.

*Prerequisite: Psychology graduate student*  
*Fall, 3 credits, ABCF grading*

**PSY 538 Method of Intervention: Treatment of Externalizing Disorders and Relationship Problems**

This course focuses on the treatment of externalizing disorders of adults and children as well as intimate partner problems like relationship discord and partner abuse. A developmental focus is taken as exemplified by coverage of child externalizing problems such as Oppositional Defiant Disorder, Conduct Disorder, Attention Deficit Disorder, Borderline Personality Disorder, and Partner Abuse. Treatments of alcohol abuse and eating disorders in both teens and adults are presented. Finally, treatment of schizophrenia is addressed along with coverage of the course of schizophrenia across the lifespan. Individual, couple, and family treatments are reviewed.

*Prerequisite: Psychology graduate student*  
*Spring, 3 credits, ABCF grading*

**PSY 541 Social Psychology of Close Relationships**

High-level overview of current theory and research on the social psychology of close relationships.

*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 542 Psychology of Addictive Behaviors**

Study of psychological, behavioral, and biological theories of addiction.

*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 543 Attachment**

This course examines current psychological theories of infant-parent and child-parent relationships and adult-adult attachment with special attention to assessment methods, clinical applications, and controversy regarding the importance of early experience.

*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 544 Emotion and Cognition**

This course focuses on fundamental questions regarding the interaction between emotion and cognition, and how this interaction can be measured. Key topics will include: differentiating emotions from other affective states, understanding the functions of discrete emotions, the role of the consciousness in emotional experience, and whether emotions can be controlled; additionally, the course will address emotion-cognition interactions in the domains of memory, attention, perception, and reasoning/decision-making. We will also address developmental changes and cross-cultural differences in emotion and cognition. The goal of the course is to be able to develop a translational research proposal rooted in basic research on emotion and cognition.

*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 545 Psychopathology: Conceptual Models and Internalizing Disorders**

Theory and research on abnormal behavior in children, adolescents, and adults. A lifespan development approach is taken, with a focus on classification, conceptualizations, and models of psychological disorders, and the phenomenology, epidemiology, course, etiology, pathogenesis, psychopathology, and pathophysiology of internalizing disorders such as mood and anxiety disorders.

*Prerequisite: Psychology graduate student*  
*Fall, 2 credits, ABCF grading*

**PSY 546 Measurement and Scaling**

A historical introduction to the measurement of psychological variables and survey of contemporary scaling methods with an emphasis on psychophysical scaling and experimental applications.

*Fall or spring, alternate years, 3 credits, ABCF grading*

**PSY 549 Prejudice and Discrimination**

This course will provide an overview of theoretical perspectives, research methods, empirical findings, and practical applications of psychological research on prejudice, stigma, and intergroup relations. Critical thinking about theorizing and research in this area

will be emphasized during class discussions and through a course project. Students are admitted with permission by instructor.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 552 Social and Personality Development**

A survey of milestones and processes of social development in infancy and childhood. Relevance to understanding adult personality and social relationships is emphasized.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 555 Social Psychology**

An introduction to social psychology, a field of study examining how people feel about, think about, and influence others. Topics include attitudes, motivation, social judgments, and interpersonal behaviors. Coursework focuses on identifying basic principles that transcend particular content domains.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 558 Theories of Social Psychology: Health Applications**

This course provides an overview of the ways in which social psychological theories and perspectives can be used to understand thoughts and behavior relevant to health and illness. It covers social influence, social comparison, pluralistic ignorance, social support, cognitive dissonance, message framing, and fear communication. The course also covers links between personality characteristics and health and how broader social and cultural environment affects health and illness.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 559 Psychology of Women's Health**

This course covers a variety of psychologically important topics in women's health based on current research findings. We address psychological contributors to and consequences of women's health and illness, focusing on diseases that affect women differently or disproportionately from men (including coronary heart disease, cancer, AIDS, and autoimmune diseases), women's reproductive health (including menstruation, contraception, pregnancy, infertility, and menopause), health behaviors (including substance abuse, exercise, and eating), and other topics such as violence against women, women's mental health, and women as health-care providers and health researchers.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 560 Neuropsychology**

The functions of the normal and pathological primate brain in behavior. Consideration of anatomical, neurophysiological, and pharmacological correlates of behavioral functions such as perception, attention, motivation, learning, memory, cognition, and language. The behavioral consequences of various forms of brain pathology are discussed.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 561 Cognitive and Behavioral Neuroscience I**

This course introduces students to neural elements responsible for processing information supporting sensation, perception, cognition, and movement. Starting with the philosophy of the mind and the history of neuroscience, the course proceeds with an introduction of cells, neural signaling, transmitters, and receptors. How these elemental units are integrated to support emergent properties, such as object recognition, is illustrated. Conversely, examples of complex behavioral impairments resulting from dysfunction in elemental units are illustrated. The course proceeds to cover neural metabolism, and its relationship to disorders of memory and motor dysfunction. Last, stress and its role in neuropsychological disorders are discussed.

*Spring, 3 credits, ABCF grading*

### **PSY 562 Cognitive and Behavioral Neuroscience II**

Cognitive and Behavioral Neuroscience illustrates how cellular circuits support function. Classic experiments demonstrating function for the use of electrophysiological data, lesions, and transmitter manipulations are discussed. Students interested in understanding how individual neurons and neural circuits and integrated regional systems directly support specific behaviors will find this course of interest. A textbook is used for the readings.

*Fall, 3 credits, ABCF grading*

### **PSY 563 Neuropsychological Assessment**

Classroom discussions of issues in neuropsychological assessment and design of assessment batteries are combined with practical experience in the assessment of clinical populations. Each student is assigned to a supervisor to learn assessment techniques for research and/or clinical practice.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 564 Neuropsychopharmacology**

This course covers the mechanisms of transmitters and related drug action in the nervous system. In addition to exploring transmitter/receptor relationships, the course covers the sequence of events initiated by this action. Through understanding of these processes, the course then links drug action to nervous system outcomes such as movement, cognition, pain, and mood.

*Spring, alternate years, 3 credits, ABCF grading*

### **PSY 566 Laboratory Rotations in Cognitive and Behavioral Neuroscience I, II**

This is a two-semester sequence devoted to instruction in a variety of laboratory techniques. Students spend a minimum of four weeks in each of three different laboratories of faculty in the program.

*Fall (Section I); Spring (Section II), 3 credits, S/U grading*

*May be repeated once for credit*

### **PSY 581 Cognitive and Behavioral Neuroscience Colloquium I**

Colloquium presentations on current research problems by advanced students, staff, and visiting scientists. This sequence is required

of all students in the Biopsychology Program.

*Fall, 0-3 credits, S/U grading  
May be repeated for credit*

### **PSY 582 Cognitive and Behavioral Neuroscience Colloquium II**

Colloquium presentations on current research problems by advanced students, staff, and visiting scientists. This sequence is required of all students in the Biopsychology Program.

*Spring, 0-3 credits, S/U grading  
May be repeated for credit*

### **PSY 583 Experimental Psychology Colloquium**

Seminars on current research problems directed by students, staff, and invited scientists. Required of all Experimental/Cognitive students.

*Fall, 0-1 credit, S/U grading  
May be repeated for credit*

### **PSY 584 Experimental Psychology Colloquium**

Seminars on current research problems directed by students, staff, and invited scientists. Required of all Experimental/Cognitive students.

*Spring, 0-1 credit, ABCF grading  
May be repeated for credit*

### **PSY 594 Psychology of Gender**

This class examines how gender affects and is affected by behavior, thoughts, and emotions. We investigate gender differences and similarities across the lifespan and consider various perspectives on the study of gender, including psychobiology, social cognitive theory, social role theory, and cross-cultural research.

*Fall or spring, alternate years, 3 credits, ABCF grading*

### **PSY 596 Psychopathology: Externalizing and Psychotic Disorders**

Theory and research of abnormal behavior in children, adolescents, and adults. A lifespan development approach is taken, with a focus on the phenomenology, epidemiology, course, etiology, pathogenesis, psychopathology, and pathophysiology of externalizing disorders (e.g., conduct, disorder, personality disorders, substance use disorders) and psychotic disorders.

*Prerequisite: Must be Psychology graduate student*

*Spring, 2 credits, ABCF grading*

### **PSY 602 Assessment: Personality Testing, Intellectual/Cognitive Testing, and Child Parent Assessment**

Self-report and projective measures of personality and psychopathology; targeted assessments and measures; intellectual and cognitive assessment; assessment of children and parents; ethics and cultural diversity.

*Prerequisite: Must be clinical doctoral student*

*Spring, 2 credits, S/U grading*

### **PSY 603 Ethics and Professional Issues**

Ethics and professional issues. Required of all first-year clinical students.

*Prerequisite: Clinical psychology doctoral student*

*Spring, 2 credits, S/U grading*

**PSY 604 Intervention Practicum**

Exposure of the application of clinical intervention procedures.

*Prerequisite: PSY 537 or PSY 538; must be Clinical psychology doctoral student*  
Fall, 2 credits, S/U grading

**PSY 605 Advanced Clinical Practicum**

Exposure to the application of advanced intervention procedures.

*Prerequisite: PSY 604 and Clinical psychology doctoral student*  
Fall and spring, 2 credits, S/U grading

**PSY 606 Supervised Practice**

Supervised experience for advanced clinical students.

*Prerequisite: Clinical psychology doctoral student*  
Fall and spring, 3 credits, S/U grading

**PSY 608 Clinical Psychology Internship**

Qualified clinical students carry out supervised clinical responsibilities in settings approved by the faculty.

*Prerequisite: Clinical psychology doctoral student*  
Fall and spring, 1 credit, S/U grading

**PSY 610 Seminars in Selected Topics**

Topics are selected on the basis of the needs of the graduate program and research interests of the staff.

*Prerequisite: Permission of instructor*  
Fall, 0-3 credits, ABCF grading  
May be repeated for credit

**PSY 620 Seminars in Selected Topics**

Topics are selected on the basis of the needs of the graduate program and research interests of the staff.

*Prerequisite: Permission of instructor*  
Spring, 0-3 credits, ABCF grading  
May be repeated for credit

**PSY 621 Seminar in Teaching Methods**

Theory and pragmatics of good college teaching. Topics include lecturing, use of discussion, types of evaluation of students and teachers, factors affecting undergraduate learning, ethics, student-faculty relations, course administration, and audio-visual devices.

*Prerequisites: Matriculated psychology graduate student; permission of instructor*  
Fall or spring, 0-3 credits, ABCF grading  
May be repeated for credit

**PSY 696 Readings**

*Prerequisite: Permission of instructor*  
1-12 credits, S/U grading  
May be repeated for credit

**PSY 698 Research**

*Prerequisite: Permission of instructor*  
1-12 credits, S/U grading  
May be repeated for credit

**PSY 699 Dissertation Research On Campus**

Dissertation research under direction of advisor.

*Prerequisite: Advancement to candidacy (G5); major portion of research must take*

*place on SB campus, at Cold Spring Harbor, or at Brookhaven National Lab*

*Fall, spring, and summer, 1-9 credits, S/U grading*  
May be repeated for credit

**PSY 700 Dissertation Research Off Campus—Domestic**

*Prerequisite: Must be advanced to candidacy (G5); major portion of research will take place off campus, but in the U.S. and/or U.S. provinces (Brookhaven National Lab and Cold Spring Harbor Lab are considered on campus); all international students must enroll in one of the graduate student insurance plans and should be advised by an International Advisor*

*Fall, spring, and summer, 1-9 credits, S/U grading*  
May be repeated for credit

**PSY 701 Dissertation Research Off Campus—International**

*Prerequisite: Must be advanced to candidacy (G5); major portion of research will take place outside of the U.S. and/or U.S. provinces; domestic students have the option of the health plan and may also enroll in MEDEX; international students who are in their home country are not covered by the mandatory health plan and must contact the Insurance Office for the insurance charge to be removed; international students who are not in their home country are charged for the mandatory health insurance (if they are to be covered by another insurance plan, they must file a waiver by the second week of classes; the charge will only be removed if the other plan is deemed comparable); all international students must receive clearance from an international advisor*

*Fall, spring, and summer, 1-9 credits, S/U grading*  
May be repeated for credit

**PSY 800 Full-Time Summer Research**

*0 credit, S/U grading*  
May be repeated

**PSY 810 Summer Research**

*0 credit, S/U grading*

**PSY 820 Summer Teaching-CED**

*0 credit, S/U grading*