

Psychology

IN THE COLLEGE OF SCIENCES

OFFICE: Life Sciences 110

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WEBSITE: <http://www.psychology.sdsu.edu>

Accredited by the American Psychological Association (Clinical Psychology).

Faculty

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Paul E. Gilbert, Ph.D., Professor of Psychology [Senate
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Co-Director of Clinical Training and of Doctoral Program

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Joseph M. Price, Ph.D., Professor of Psychology

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Vice President for Academic Affairs, Resource Management

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(Graduate Adviser)

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Miguel T. Villodas, Ph.D., Assistant Professor of Psychology

Jillian L. Wiggins, Ph.D., Assistant Professor of Psychology

Associateships and Assistantships

Graduate teaching associateships and graduate assistantships in psychology are available to a limited number of qualified students. Further information may be obtained from the master's program adviser, Department of Psychology.

General Information

A Master of Science degree program in applied psychology with a focus on industrial/organizational psychology, quantitative methods, or program evaluation is offered. A Master of Arts degree program with a specialization in physical and mental health research, developmental, behavioral and cognitive neuroscience, social/personality or learning and cognition is available for persons who expect subsequently to pursue a Ph.D. degree. For students currently enrolled in the Ph.D. program, an M.S. in clinical psychology is offered. In addition, the Department of Psychology, jointly with the Department of Psychiatry, University of California, San Diego, School of Medicine, offers an APA-accredited program of graduate study leading to the Doctor of Philosophy degree in clinical psychology with programs of study in behavioral medicine, neuropsychology, or experimental psychopathology. A scientist-practitioner training model serves as a guide for the experiences provided for doctoral students. It is expected that graduates of this program will be prepared to serve as scientists, innovators, and leaders in the field of clinical psychology. These programs can prepare students for teaching careers.

The doctoral program requires that students spend a minimum of five calendar years in study and research. In the first four years, doctoral students must complete their prescribed coursework satisfactorily as well as engage in research and a series of clinical practica. In the last year of the program all students must complete a 12-month APA-accredited clinical internship.

The department has a strong scientific research orientation, and emphasizes the master's degree as preparation for doctoral work. Students in all programs must take an advanced statistics/experimental design course sequence and produce an empirical research thesis.

The department awards approximately 30 master's degrees annually. A substantial proportion of the graduates who apply go on to enroll in doctoral work at well-known universities.

The clinical psychology faculty staff a Psychology Clinic for graduate clinical training and service to the metropolitan San Diego community.

Admission to Master's and Doctoral Study

Students applying for admission should electronically submit the university application available at <http://www.calstate.edu/apply> along with the \$55 application fee.

All applicants must submit admissions materials separately to SDSU Graduate Admissions and to the Department of Psychology.

Graduate Admissions

The following materials should be submitted as a complete package directly to:

Graduate Admissions
Enrollment Services
San Diego State University
San Diego, CA 92182-7416

1. Official transcripts (in sealed envelopes) from all post-secondary institutions attended;

NOTE:

- Students who attended SDSU need only submit transcripts for work completed since last attendance.
 - Students with international coursework must submit both the official transcript and proof of degree. If documents are in a language other than English, they must be accompanied by a certified English translation.
2. GRE scores (<http://www.ets.org> SDSU institution code 4682);

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3. English language or IELTS score, if the language of instruction was not English (for English language see: <http://www.ets.org>; for IELTS see <http://www.ielts.org>; SDSU institution code 4682).

Department of Psychology

Students applying to both the SDSU/UCSD joint doctoral program and the SDSU master's degree program are required to file only one university application and pay only one fee, which covers both programs. However, separate departmental applications, one for the master's program and one for the doctoral program, must be filed if the student wishes to be considered for both programs.

Master of Arts Degree in Psychology

Master of Science Degree in Psychology

For application information, please consult the program website: <http://www.psychology.sdsu.edu/graduate/masters-programs/prospective-students/application-procedures>. All application materials are submitted electronically and include the following:

1. Departmental application;
2. Statement of purpose;
3. Curriculum vitae;
4. Completed application for an assistantship (if applicant is interested in this type of financial support);
5. Three letters of recommendation from persons familiar with the applicant's academic performance.

Ph.D. Degree in Clinical Psychology

For application information, please consult the program website: <http://clinpsyc.sdsu.edu>. All application materials are submitted electronically.

Section I. Master's Degree Programs

Admission to the Degree Curriculum

Admission to the Department of Psychology master's program involves a two-step process. Applicants must file one application with the university, and a separate application package with the Department of Psychology.

To be considered for admission to the Department of Psychology programs, applicants must satisfy particular department requirements. These requirements and instructions for completing the department application package are shown below. The department application form is available at <http://www.psychology.sdsu.edu>. Students are admitted to the master's programs in the fall semester only.

To qualify for admission to the master's programs in psychology, the student must have:

1. For the M.A. program: An undergraduate major in psychology (or coursework equivalent to the SDSU bachelor's degree) consisting of at least 24 upper division units with a grade point average of 3.0 or better. The major must include classes in general psychology, physiological psychology, and statistical methods. In addition, the student must have completed three of the following courses: abnormal psychology, cognitive psychology, developmental science, intermediate statistics, introduction to research methods, psychology of learning, psychology of personality, psychological testing and measurement, sensation and perception, or a psychology laboratory course. Six units of upper division psychology electives, which may be selected from the above list, are also required.

2. For the M.S. applied program: An undergraduate major in psychology (or coursework equivalent to the SDSU bachelor's degree) consisting of at least 24 upper division units with a grade point average of at least 3.0. The major must include classes in general psychology, statistical methods, psychological testing and measurement, intermediate statistics or research methods, and at least one class providing research experience in psychology. In addition, the student must have completed three of the following classes: developmental science, social psychology, abnormal psychology, psychology of personality, cognitive psychology, industrial/organizational psychology, experimental psychology with laboratory, psychology of learning, or sensation and perception. Six units of upper division psychology electives, which may be from the above list, are also required.
3. A grade point average of not less than 3.0 in all undergraduate coursework.
4. A minimum score above the 50th percentile rank on both the verbal and quantitative sections of the GRE General Test.
5. The GRE should be taken by November. The GRE Subject (Advanced Test in Psychology) is optional but highly recommended to non-psychology majors. The student should take this test as well as the GRE General Test in sufficient time so that the results will be available prior to the application deadline.

Meeting all of the indicated criteria does not guarantee admission to the program, since admission is also dependent on the facilities and resources available in the department.

For admission to the university, all students must satisfy the general requirements for classified graduate standing, as described in Part Two of this bulletin.

NOTE: Admission to the university does not guarantee admission to the Psychology Department.

Advancement to Candidacy

The student must satisfy the general requirements for advancement to candidacy as stated in Part Four of this bulletin. Having obtained three grades of C or lower in graduate courses automatically precludes advancement to candidacy.

In addition, students must have an approved thesis proposal prior to advancement to candidacy.

General Requirements for all Master's Degree Programs

In addition to meeting the basic requirements for the master's degree as described in Part Four of this bulletin, the student must complete a graduate program of at least 30 units (36-38 units for the Master of Science degree). Only classified graduate students are permitted to enroll in any 600-numbered (or higher) courses in psychology. The departmental graduate adviser must approve all programs of study except the Master of Science in clinical psychology. For the Master of Science in clinical psychology, departmental approval is provided by the program director of the joint doctoral program.

Psychology 670A-670B or 770A-770B are required in all master's degree programs in the Department of Psychology. In addition, for all degrees other than the Master of Science in clinical psychology, Psychology 600 (Research Orientation), Psychology 799A (Thesis), and an oral examination on the thesis are also required.

Specific Requirements for the Master of Arts Degree

(Major Code: 20011) (SIMS Code: 778301)

The Master of Arts degree requires the completion of a minimum of 30 units in psychology to include Psychology 610, 670A-670B or 770A-770B, two units of 600, one unit of 797, and 799A. Students must also complete Psychology 561 or 760; two courses selected from Psychology 632, 740, 751, 787; one course selected from Psychology 568, 569, 675, 767; and one elective course.

All new Master of Arts degree students are required to take two units of Psychology 600 during their first year.

Specific Requirements for the Master of Science Degree

(Major Code: 20011) (SIMS Code: 778302)

The Master of Science degree may be obtained with the following concentrations:

1. **The Applied Psychology program (SIMS Code: 778311) has two specializations: Quantitative Methods and Industrial and Organizational Psychology.**

The specialization in quantitative methods prepares students to properly implement and interpret the results of data analyses common to psychology. The program prepares students to enter into a doctorate program in quantitative psychology or secure non-academic industry positions specializing in analysis of behavioral data.

Specific requirements for students selecting the Quantitative Methods specialization (SIMS Code: 778314) are: A minimum of 38 units, 32 of which must be completed in psychology, to include Psychology 670A-670B or 770A-770B, 600 (two units), 630, 675, 775, 776, 791 (six units), and 799A (Thesis). Of the nine units of graduate electives required, at least six must be selected from psychology; three units of graduate electives should be from other departments with prior approval of the master's program adviser.

The specialization in industrial and organizational psychology prepares students to apply psychological knowledge to make decisions and solve problems in organizations. This specialization involves training in theory, research, and practice in industrial and organizational psychology. Although some graduates with a specialization in industrial and organizational psychology continue their studies in a Ph.D. program, most graduates work for corporations or consulting firms in positions involving the development, delivery, and evaluation of human resources interventions.

Specific requirements for students selecting the Industrial and Organizational specialization (SIMS Code: 778304) are: A minimum of 38 units, 35 of which must be completed in psychology, to include Psychology 670A-670B or 770A-770B, 600 (Research Orientation, 2 units), 621, 622, 630, 675, 721, 722, 792 (Internship in Industrial and Organizational Psychology, 6 units), and 799A (Thesis). Three units of graduate electives may be selected from psychology or from other departments with prior approval of the master's program adviser.

2. **Clinical Psychology (included within the Ph.D. program; not available separately).**

(Major Code: 20031) (SIMS Code: 778309)

A minimum of 36 units in psychology to include Psychology 770A-770B, 801, 820, 840, 849, 850, 855, 856, UCSD Clinical Psychology 227A (Mind, Brain, and Behavior I), and 896. UCSD Clinical Psychology 227B (Mind, Brain, and Behavior II) and Psychology 897 are optional. Completion of the second year project and approval by a committee consisting of a minimum of three faculty members representing both SDSU and UCSD. For this degree only, all approvals and advancement to candidacy will be completed by the program director of the joint doctoral program.

Section II. Doctoral Program

WEBSITE: <http://clinpsyc.sdsu.edu>

Admission to the Degree Curriculum

To be considered for admission to the SDSU/UCSD joint doctoral program in clinical psychology, students must meet the general requirements for admission to both universities with classified graduate standing as outlined in the respective current catalogs. These include (a) an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or equivalent academic preparation, as determined by the graduate deans of the two institutions; (b) a minimum overall grade point average of 3.0; (c) a grade point average of at least 3.25 in the last 60 semester (90 quarter) units attempted; (d) good standing at the last institution attended; (e) GRE scores at the 55th percentile or above; and (f) a competitive score on the Psychology Subject GRE, which is required to apply to the program. However, given the large number of applicants in the field of clinical psychology, the selection process is designed to identify the best from among many highly qualified applicants. Thus no minimum set of qualifications in any way guarantees admission. Personal interviews will be conducted with the most promising applicants. Admission of any candidate who deviates from the minimum standards can only be granted with special permission of both graduate deans. No faculty member has authority to make an offer of a position in the program to any applicant, implied or otherwise, without final recommendation of the program directors and approval of the graduate deans.

Although an undergraduate psychology major is not mandatory for admission, applicants should have taken upper division courses in the following areas: abnormal psychology, advanced experimental methods, biological bases of behavior or physiological psychology, cognitive bases of behavior, intermediate/advanced statistical methods, life span developmental psychology, psychological testing and measurement, social psychology, and testing and measurement.

An option for Ph.D. students in clinical psychology is to concurrently pursue the Master of Public Health (MPH) degree in the School of Public Health. Students jointly enrolled will first be accepted into the psychology program and then be recommended by the psychology program for admission to the MPH program. Students may be recommended at any time prior to receiving their doctoral degree. Following acceptance into the MPH degree, students must complete all required core classes as well as requirements for the concentration in health promotion. A specially designed program of study that incorporates requirements from both degree programs has been developed. Subsequent to coursework, MPH candidates are required to complete a comprehensive examination in their area of study. (For more information, see the section of this bulletin under "Public Health.")

The joint doctoral program is a year-round program. Students will be admitted to graduate programs in psychology only in the fall semester. All application material for the Ph.D. program must be received by the doctoral program office and the SDSU Office of Graduate Admissions no later than December 1 (unless otherwise stated on the program's website). Because the research and clinical requirements of the program may involve work with vulnerable populations, all incoming students will complete a background check prior to initial matriculation.

Detailed instructions for applying to the program, along with all necessary forms, are located on the SDSU/UCSD Joint Doctoral Program in Clinical Psychology Web page, which can be found at <http://clinpsyc.sdsu.edu>. Please review and follow these instructions carefully. Specific questions not answered by these materials should be e-mailed to PsycJDP@sdsu.edu.

Specific Degree Requirements for the Doctor of Philosophy Degree in Clinical Psychology

(Major Code: 20031) (SIMS Code: 778310)

The student is guided by requirements for the doctoral degree program given in Part Four of this bulletin. The core curriculum will normally be completed during the first two years. Completion of this core insures that students have a general background in empirical psychology (e.g., physiological, social, cognitive-affective, and individual bases of behavior); knowledge of conceptualizations of personality and psychopathology; an awareness and appreciation of professional ethics, conduct, and multicultural issues in an increasingly diverse society; knowledge of the theory and techniques of psychological assessment; therapeutic interventions, acquisition of therapeutic skills; a minimum of 1,000 hours of supervised clinical experience; and competence in research methods. Specific courses providing this background at SDSU include Psychology 770A-770B, 801, 820, 840, 849, 850, 855, 856, UCSD Clinical Psychology 227A (Mind, Brain, and Behavior I), 875 (or 775), 896, 897, and UCSD Clinical Psychology 227B (Mind, Brain, and Behavior II). Students also must take a course in cognitive/affective bases of behavior. This is typically taken at UCSD.

During the second year, students select a research topic for a second year project, which is similar to a master's thesis. Students are responsible for conducting all phases of this project under the supervision of their joint guidance committee. Students may also elect to obtain a master's degree in clinical psychology by completing requirements for the Master of Science degree.

After completing the basic two-year core, work in subsequent years will diverge for students in each of the three major areas of study: behavioral medicine, experimental psychopathology, and neuropsychology.

Students with a program of study in behavioral medicine are required to take Psychology 842 (Behavioral Medicine Seminar: Assessment) and Psychology 843 (Behavioral Medicine Seminar: Intervention), typically in the third year. Students taking experimental psychopathology are required to take Psychology 833 (Seminar in Developmental Psychopathology) and Psychology 852 (Seminar in Experimental Psychopathology Research), typically in the third year. Students in neuropsychology are required to take UCSD Clinical Psychology 294 (Seminar in Neuropsychology).

In the fourth year, students are expected to submit and defend a dissertation proposal. Many students will also collect the data for and begin writing the dissertation during this year.

The fifth year is reserved for the completion of a doctoral dissertation and a full-time clinical internship that is identified by the student and the joint guidance committee. While on internship, students must remain registered in Psychology 894, (Clinical Internship) and Psychology 899 (Doctoral Dissertation).

Students are expected to maintain the highest standards of academic performance with a minimum 3.0 grade point average. According to doctoral program policy, falling below a 3.0 GPA automatically places the student on academic probation. The student may not remain on academic probation for more than one year. In addition, three grades below a B (i.e., a B- or lower or No Credit) are grounds for dismissal from the program without further qualification regardless of the student's overall GPA.

In clinical psychology, adherence to the Ethical Principles of Psychologists (APA, Revised, 2003) is mandatory. Students who knowingly or unknowingly violate any part of the ethical code may be dismissed from the program without further qualification regardless of coursework, research, or other academic achievement. A copy of the ethical code is made available to students at their initial orientation.

Prior to advancement to candidacy, students will be required to sign a statement of understanding that (1) the doctoral faculty will communicate with the clinical internship agency all information relevant to the student's academic and professional qualifications for placement and continuation in the internship and (2) the student understands that the clinical internship must be satisfactorily completed before graduation.

Faculty

The following faculty members of the cooperating institutions participate in the joint doctoral program in clinical psychology and are available for direction of research and as members of joint doctoral committees.

San Diego State University:

Program Director: Malcarne

Program Members: Amir, Blashill, Carper, Cronan, Fishman, Gallo, Gilbert, Helm, Holcomb, Kappenman, Malcarne, Marinkovic, Matt, Mattson, Müller, Murphy, Price, Riley, Roesch, Sereno, M. Taylor, Thoman, Thomas, Vaughn, F. Villodas, M. Villodas, Weersing, Wells, Wiggins, Yeh

University of California, San Diego:

Program Director: Heaton

Program Members: Aarons, Afari, Akshoomoff, Anderson, Angkaw, Ayers, Backhaus, Bagot, Ballantyne, Bangen, Bellugi, Bloss, Bondi, Boutelle, Brookman-Frazee, G. Brown, S.A. Brown, S.J. Brown, Buzzella, Cadenhead, Calfas, Campbell, Cardenas, Carver, Cherner, Corey-Bloom, Delano-Wood, Delis, Depp, Doran, Edmonds, Eyler, Filoteo, Fiorentino, Gallegos Rodriguez, Giedd, Gollan, Granholm, Grant, Groessl, Haist, Haller, Harrington, Heaton, Heppner, Hong, Iudicello, Jacobson, Jacobus, Jak, Jernigan, Jeste, Kelsoe, Kremen, Kritchevsky, Kutas, Lang, Light, Marcotte, Marquine, Mausbach, Max, McDonald, Mills, D. Moore, R. Moore, Morgan, Morland, Myers, Nguyen, Nichols, M. Norman, S. Norman, Palmer, Parry, Patrick, Patterson, Perivoliotis, Perry, Ruberg, Rutledge, Sadler, Salmon, Saxena, Schiehser, Schuckit, Sieber, Sparta, Stadnick, Stein, Strathdee, Swerdlow, Tapert, C. Taylor, Townsend, Trauner, Trim, Twamley, Wall, Wetherell, Wierenga, Williams, Worley, Zhu, Zisook, Zlatar

Courses Acceptable for Master's and Doctoral Degree Programs in Psychology (PSY)

Refer to Courses and Curricula and Regulations of the Division of Graduate Affairs sections of this bulletin for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

UPPER DIVISION COURSES

PSY 561. Advanced Neuropsychology (3)

Prerequisite: Psychology 360 or 361 or grade of B (3.0) or better in Psychology 260.

Biological bases of neuropsychological function and dysfunction, relationships between brain structure and function, neuropsychological assessment tools.

PSY 568. Systems Neuroscience (3)

Two lectures and two hours of activity.

Prerequisite: Psychology 360, 361, 365, or Biology 570.

Neuroanatomy and neurophysiology of the mammalian through a signals and systems lens to include auditory, cell physiology, motor and limbic systems, neural development, simple neural models, somatosensory, and visual components. Neuroimaging physics.

PSY 569. Foundations of Neuroimaging (3)

Two lectures and two hours of activity.

Prerequisite: Psychology 101.

Physical and mathematical foundations of diffusion, functional, structural, perfusion MRI, and fMRI time series analysis. Cortical-surface based reconstruction and data analysis. Neural basis, localization, and recording of EEG and MEG signals.

PSY 596. Selected Topics in Psychology (1-3)

Prerequisites: Psychology 101 and consent of instructor.

Intensive study in specific areas of psychology. May be repeated with new content. See *Class Schedule* for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES

NOTE: Graduate courses in psychology are not open to post-baccalaureate unclassified students.

NOTE: Priority for enrollment in graduate courses in psychology is given to psychology students who have the courses as requirements in their respective programs.

PSY 600. Research Orientation (1) Cr/NC

Prerequisite: Admission to the master's degree program.

Research in psychology. All master's degree students are required to enroll in this course. Maximum credit two units.

PSY 610. Advanced Research Methods in Psychology (3)

Prerequisite: Admission to the master's degree program.

Diverse research methods across different areas of psychology. Interdependence of theory and methodology in research to include design, measurement, and validity.

PSY 621. Seminar in Personnel Psychology (3)

Prerequisites: Psychology 320 and consent of master's program adviser.

Problems and procedures in selection, classification, and performance appraisal, focusing on testing in industry, the interview, and other selection and assessment devices. Criterion development and measurement methods.

PSY 622. Seminar in Organizational Psychology (3)

Prerequisites: Psychology 321 and consent of master's program adviser.

Applications of psychological principles and methods of investigation to problems of industrial relations and motivation of employees; factors influencing morale and employee productivity; criteria of job proficiency; psychological aspects of worker-management relationships and leadership.

PSY 630. Seminar in Program Evaluation (3)

Prerequisite: Graduate standing in psychology.

Theory and practice of program evaluation. Surveys concepts, issues, and methods relevant to evaluating programs, services, and interventions in the public and private sectors.

PSY 632. Theories and Methods in Developmental Science (3)

Prerequisite: Psychology 331 or 332.

Philosophical and biological origins of developmental psychology. Examination of processes that shape perception, language acquisition, socialization, and cognition.

PSY 670A-670B. Advanced Statistics in Psychology (3-3)

Two lectures and two hours of activity.

Prerequisites: Psychology 370, 410, a passing score on the departmental statistics placement test, and consent of master's program adviser.

Fundamentals of multiple regression and correlation. Principles of experimental design. Analysis of variance including factorial and repeated-measures designs and a priori and post hoc comparisons including trend analysis. Computer-based statistical packages in the analysis of data from psychological research.

PSY 675. Seminar in Psychological Measurement (3)

Prerequisites: Psychology 370 and consent of master's program adviser.

General principles, theory and methods underlying measurement in studies of group and individual differences in controlled experiments.

PSY 696. Selected Topics in Psychology (3)

Prerequisite: Consent of instructor.

Intensive study in specific areas of psychology. May be repeated with new content. See *Class Schedule* for specific content. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

PSY 721. Advanced Seminar in Personnel Psychology (3)

Prerequisites: Psychology 621 and consent of master's program adviser.

Selected areas within personnel psychology including selection, classification, performance appraisal, test development, criterion development, measurement and scaling techniques. Course may be repeated with new content with permission of instructor and master's program adviser. Maximum credit six units applicable to a master's degree.

PSY 722. Advanced Seminar in Organizational Psychology (3)

Prerequisites: Psychology 622 and consent of master's program adviser.

Selected areas within organizational psychology including leadership, motivation, organizational development, and organizational effectiveness. Course may be repeated with new content with permission of instructor and master's program adviser. Maximum credit six units applicable to a master's degree.

PSY 740. Seminar in Social Psychology (3)

Prerequisites: Undergraduate course in social psychology and graduate level status.

Classic and contemporary issues in social psychology including social influence, person perception, attitudes and attitude change, group dynamics, intergroup conflict, and cultural influence.

PSY 751. Clinical Psychological Science: Theory and Methods (3)

Prerequisites: Graduate standing in psychology and Psychology 350.

Methodological and theoretical foundations in clinical psychological science. Dissemination/implementation, nosology, and professional issues in clinical psychology.

PSY 760. Seminar in Physiological Correlates of Behavior (3)

Prerequisites: Psychology 260 or six units of biology; and consent of master's program adviser.

Course may be repeated provided it is offered by a different instructor and the subject matter is substantially different. To enroll in the seminar for the second time, the student must submit a petition to be approved by the professor of the course and the master's program adviser. Maximum credit six units applicable to a master's degree.

PSY 767. Seminar in Cognitive and Behavioral Neuroscience (3)

Prerequisite: Consent of instructor for programs outside of psychology master of arts and doctoral program.

Issues of contemporary importance in neuroscience. See *Class Schedule* for specific content. Course may be repeated provided it is offered by a different instructor and the subject matter is substantially different. To enroll in the seminar for the second time, the student must submit a petition to be approved by the professor and the master's program adviser. Maximum credit six units applicable to a master's degree.

PSY 768. Advanced Systems Neuroscience (3)

Two lectures and two hours of activity.

Prerequisite: Consent of instructor for programs outside of Master of Arts degree in psychology and doctoral program in clinical psychology.

Neuroanatomy and neurophysiology of the mammalian through a signals and systems lens to include auditory, cell physiology, motor and limbic systems, neural development, simple neural models, somatosensory, and visual components. Neuroimaging physics.

PSY 769. Advanced Foundations of Neuroimaging (3)

Two lectures and two hours of activity.

Prerequisite: Consent of instructor for programs outside of Master of Arts degree in psychology and doctoral program in clinical psychology.

Physical and mathematical foundations of diffusion, functional, structural, perfusion MRI, and fMRI time series analysis. Cortical-surface based reconstruction and data analysis. Neural basis, localization, and recording of EEG and MEG signals.

PSY 770A-770B. Experimental Design and Data Analysis in Behavioral Research (3-3)

Two lectures and two hours of activity.

Prerequisites: Psychology 370, 410, a passing score on the departmental statistics placement test, and consent of master's program adviser.

Principles and methods of behavioral research stressing interdependence of experimental design and statistical evaluation of results. General linear model in its regression and ANOVA formulations. Advanced multiple regression and correlation techniques using computer-based statistical packages.

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PSY 775. Multivariate Statistics in Psychology (3)

Two lectures and two hours of activity.

Prerequisites: Psychology 670A-670B or 770A-770B and consent of instructor.

Introduction to multivariate techniques. Latent structure models with attention to relationship between latent constructs and observable data. Includes causal models, factor analysis (both exploratory and confirmatory), canonical correlation, path analysis, discriminant function analysis, and loglinear analysis.

PSY 776. Multilevel Modeling for Psychological Research (3)

Prerequisites: Psychology 670A and 670B or 770A and 770B with a grade of C (2.0) or better in each course.

Statistical analysis of nested or hierarchical data generated by cross-sectional and longitudinal designs common to psychological science. Examine, critique, and discuss methodological articles regarding multilevel modeling.

PSY 787. Seminar in Cognitive Psychology (3)

Prerequisite: Graduate standing in psychology.

Empirical data, methods, principles, and theories in cognitive psychology. (Formerly numbered Psychology 587.)

PSY 790. Practicum in the Teaching of Psychology (1) Cr/NC/RP

Prerequisite: Award of a graduate teaching associateship in psychology.

Supervision in the teaching of psychology, covering lecture writing, style of lecture presentation, in-class demonstration and exercise, test and syllabi construction, and grading system. Not applicable to an advanced degree.

PSY 791. Internship in Program Evaluation (1-6) Cr/NC/RP

Up to 20 hours of supervised work per week in a program approved internship setting.

Prerequisites: Psychology 630 and consent of instructor.

Supervised training in program evaluation in a program approved internship setting. Maximum credit six units.

PSY 792. Internship in Industrial and Organizational Psychology (1-6) Cr/NC/RP

Up to 20 hours of supervised work per week in a program approved internship setting.

Prerequisites: Consent of instructor. Credit or concurrent registration in Psychology 621 and 622.

Supervised training in industrial and organizational psychology in a program approved internship setting. Maximum credit six units.

PSY 796. Selected Topics in Psychology (3)

Prerequisite: Advanced master's and doctoral standing in psychology.

Intensive study in specific areas of psychology. In-depth investigation of controversial issues in the field as well as introduction to current and emerging technologies. Cognition, cognitive neuroimaging, and social perception. Maximum credit six units of 696 and 796 applicable to a master's degree with approval of graduate adviser.

PSY 797. Research (1-3) Cr/NC/RP

Prerequisite: Consent of master's program adviser.

Research in one of the fields of psychology. Maximum credit six units applicable to a master's degree.

PSY 799A. Thesis (3) Cr/NC/RP

Prerequisites: An officially appointed thesis committee and advancement to candidacy.

Preparation of a project or thesis for the master's degree. Credit is contingent upon acceptance of the completed thesis by the Department of Psychology.

PSY 799B. Thesis Extension (0) Cr/NC

Prerequisite: Prior registration in Thesis 799A with an assigned grade symbol of RP.

Registration required in any semester or term following assignment of RP in Course 799A in which the student expects to use the facilities and resources of the university; also student must be registered in the course when the completed thesis is granted final approval.

DOCTORAL COURSES

PSY 801. Seminar in History and Ethics in Psychology (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Historical background of modern psychology; in-depth examination of the American Psychological Association code of ethics and its application to the conduct of clinical psychologists.

PSY 820. Seminar in Cultural Psychology (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Cultural origins of human behavior; cultural limits of psychological knowledge.

PSY 833. Seminar in Developmental Psychopathology (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Research and theory in biological and social origins of psychopathology. Methods of assessing developmental change and stability, issues related to vulnerability and resiliency, developmental appropriateness of approaches to interventions, and role of culture as a developmental context.

PSY 840. Seminar in Personality and Social Psychology (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Research and theory in personality and social psychology. Theories of personality and individual differences, group processes, sex roles, social perception, and cross-cultural issues.

PSY 842. Behavioral Medicine Seminar: Assessment (3)

Prerequisite: Admission to doctoral program or approval by instructor and program director.

Assessment methods and issues in behavioral medicine. Development and implementation of assessment plans. Theoretical and practical aspects of psychological, behavioral, and physiological assessment methods for various health issues.

PSY 843. Behavioral Medicine Seminar: Intervention (3)

Prerequisites: Admission to doctoral program and Psychology 842.

Design and implement interventions by stressing empirically supported approaches to improve health and change health behaviors. Strengths and weaknesses of clinical community interventions.

PSY 849. Seminar and Laboratory in Counseling and Psychotherapy (4)

Two lectures and six hours of laboratory.

Prerequisite: Consent of graduate adviser.

Supervised practice in application of psychotherapeutic and counseling techniques from selected cognitive, dynamic, interpersonal, and behavioral approaches. Open only to students accepted in the doctoral program.

PSY 850. Seminar in Theory and Practice in Clinical Interventions (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Theory and application of clinical interventions, advanced study of interviewing techniques, behavioral interventions, cognitive/behavioral interventions, and family/child interventions.

PSY 852. Seminar in Experimental Psychopathology Research (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Analysis of experimental and theoretical literature as it pertains to research methodology for the study of disordered behavior.

PSY 855. Seminar in Psychological Assessment I (4)

Two lectures and six hours of laboratory.

Prerequisites: Psychology 350, 370, and consent of graduate adviser.

Theory and practice in assessment of intelligence and special abilities. Open only to students accepted in the doctoral program.

PSY 856. Seminar in Psychological Assessment II (4)

Two lectures and six hours of laboratory.

Prerequisites: Psychology 855 and consent of graduate adviser.

Theory and practice in assessment of special abilities, personality and behavior disorders. Open only to students accepted in the doctoral program.

PSY 860. Seminar in Physiological Foundations of Behavior (3)

Prerequisite: Admission to doctoral program in clinical psychology.

Research and theory in physiological psychology. Advanced study of biological rhythms, sleep and waking, stress responses, the neurophysiology of learning and memory, and research methods in physiological psychology.

PSY 875. Advanced Multivariate Statistics (3)

Two lectures and two hours of activity.

Prerequisites: Admission to the doctoral program in clinical psychology, Psychology 770A-770B, and consent of instructor.

Use of multivariate techniques. Relationship between latent constructs and observable data. Analyses such as causal models, exploratory and confirmatory factor analysis, canonical correlation, path analysis, discriminant function analysis, loglinear analysis, and hierarchical linear modeling using computer-based statistical packages.

PSY 894. Clinical Internship (3-15) Cr/NC/RP

Prerequisites: Completion of coursework, second year project, and advancement to candidacy.

Clinical training in an APA-approved internship setting.

PSY 895. Practicum in the Teaching of Psychology (1-6) Cr/NC

Prerequisite: Admission to doctoral program in clinical psychology.

Supervision in the teaching of psychology, covering lecture writing, style of lecture presentation, in-class demonstration and exercises, test and syllabi construction, and grading systems.

PSY 896. Clinical Practicum (1-15)

Prerequisite: Admission to the doctoral program.

Supervision of advanced intervention strategies applied to clinical populations.

PSY 897. Doctoral Research (1-15) Cr/NC/RP

Prerequisite: Admission to the doctoral program.

Independent investigation in the general field of the dissertation.

PSY 898. Doctoral Special Study (1-8) Cr/NC/RP

Prerequisite: Admission to the doctoral program.

Individual study in the field of specialization. Maximum credit eight units applicable to the doctoral degree.

PSY 899. Doctoral Dissertation (1-15) Cr/NC/RP

Prerequisites: An officially constituted dissertation committee and advancement to candidacy.

Preparation of the dissertation for the doctoral degree. Enrollment is required during the term in which the dissertation is approved.