INTRODUCTION

Psychology is a science whose central theme is the study of behavior. Psychology involves studying how we interact with one another and our environment. Psychology is practical; it is concerned with improving our quality of life. To achieve these ends, psychologists work in a broad range of research and applied settings. The psychology major is designed to provide a comprehensive overview of the main fields of psychology and the methods used in psychological research. The major is also designed to assist students in selecting elective courses in an area of the students’ interest. These specialty areas might include clinical/community, social, developmental/child/aging, industrial/organizational, learning/cognitive, biopsychology/health psychology and legal/forensic psychology. The major provides a basis for careers in a variety of psychology-related occupations, such as mental health agencies, hospitals, schools, businesses and public organizations. The major also prepares students for graduate training in fields such as: psychological research; clinical psychology; marriage, family therapy; teaching; social work; law; business and management; and public administration.

All students who declare psychology as their major should meet with one of the undergraduate advisers (Humanities 830J, 657-278-3102) during their first semester to develop a study plan. Students should also download the Psychology Department Student Handbook and Careers for Psychology Majors from the department website. Early consultation with an adviser is especially important.

Community College Transfer Students: A maximum of nine lower-division units of psychology courses may be applied toward the 41 units required for the psychology major. The nine units must fit the course description requirements listed in this catalog for PSYC 101, 201 and 202. Additional lower-division units taken in psychology at a community college and approved by the university may be used as university electives for graduation.

LEARNING GOALS AND STUDENT LEARNING OUTCOMES

The following goals and learning outcomes have been established for students pursuing a degree in Psychology:

Students will demonstrate familiarity with major concepts, theoretical perspectives, empirical findings and historical trends
- Apply psychological theory to scientific questions and real-world problems

Students will understand and apply basic research methods, including research design, data analysis and interpretation
- Apply psychological theory to scientific questions and real-world problems
- Manage data and analyze data using appropriate statistical methods
Students will use critical and creative thinking, skeptical inquiry and the scientific approach
- Identify appropriate basic research methods to test hypotheses empirically
- Apply psychological theory to scientific questions and real-world problems

Students will understand and apply psychological principles to personal, social and organizational issues
- Apply psychological theory to scientific questions and real-world problems
- Analyze psychological research and theory in relation to their own personal development
- Identify how diversity impacts individual and social behavior

Students will weigh evidence, tolerate ambiguity, act ethically and reflect other values underpinning psychology
- Find and evaluate relevant literature
- Employ appropriate ethical principles in psychological settings

Students will demonstrate information competence and the ability to use computers and other technology for many purposes
- Demonstrate proficient writing skills, including scientific writing in APA style
- Manage data and analyze data using appropriate statistical methods

Students will communicate effectively
- Demonstrate proficient writing skills, including scientific writing in APA style

Students will understand the complexity of sociocultural and international diversity
- Identify how diversity impacts individual and social behavior

Students will show insight into their own and others’ behavior and mental processes
- Apply psychological theory to scientific questions and real-world problems
- Analyze psychological research and theory in relation to their own personal development
- Identify how diversity impacts individual and social behavior

BACHELOR OF ARTS IN PSYCHOLOGY (120 UNITS)

The Bachelor of Arts in Psychology requires 41 units in the major, which includes experimental and laboratory courses, and electives.

Lower Division (9 units)
PSYC 101  Introductory Psychology (3)
PSYC 201  Elementary Statistics (3)
PSYC 202  Research Methods in Psychology (3)

Upper Division (32 units)
Required Courses (23 units)
Experimental Psychology (6 units), two of the following:
PSYC 302  Learning and Memory (3)
PSYC 303  Sensation and Perception (3)
PSYC 304  Comparative Animal Behavior (3)
PSYC 305  Cognitive Psychology (3)
PSYC 306  Biopsychology (3)
Laboratory (2 units), one of the following:
PSYC 302L  Laboratory in Learning and Memory (2)
PSYC 303L  Laboratory in Sensation and Perception (2)
PSYC 304L  Laboratory in Comparative Animal Behavior (2)
PSYC 305L  Laboratory in Cognitive Psychology (2)
PSYC 306L  Laboratory in Biopsychology (2)
Two of the following (6 units):
PSYC 331  Psychology of Personality (3)
PSYC 341  Abnormal Psychology (3)
PSYC 351  Social Psychology (3)
PSYC 361  Developmental Psychology (3)
One of the following (3 units):
PSYC 311  Educational Psychology (3)
PSYC 317  Psychology and Law (3)
PSYC 362  Psychology of Aging (3)
PSYC 391  Industrial/Organizational Psychology (3)
Plus the following (6 units):
PSYC 300  Computer Applications in Psychology (3)
PSYC 495  Field Placement in Psychology (3)
Elective 300- and 400-Level Courses (9 units)
Two 300- or 400-level electives in Psychology (6)
One 400-level elective, excluding PSYC 495 and 496 (3)
Special Requirements

Each course counted toward the major must be completed with a grade of “C” (2.0) or higher. In addition, the overall minimum GPA must be 2.0 or greater for all units attempted in Psychology courses whether the course is counted toward the major or not; whether upper or lower division; or whether taken at Cal State Fullerton or elsewhere. No more than a total of three units of either PSYC 498 or PSYC 499 may be applied toward the major. No more than three units of PSYC 495 may be applied toward the major. PSYC 496 may not be used toward the major, but three units of this course may be counted toward units to graduate from the university. A minimum of 21 units counted toward the major must have been completed in psychology at CSUF.

Upper-Division Writing Requirement

To satisfy the course component of the university’s Upper-Division Writing Requirement, psychology majors must complete three courses totaling eight units with at least a “C” (2.0). These same courses satisfy a portion of the requirements for the major.

Lecture/discussion, two of the following:
PSYC 302 Learning and Memory (3)
PSYC 303 Sensation and Perception (3)
PSYC 304 Comparative Animal Behavior (3)
PSYC 305 Cognitive Psychology (3)
PSYC 306 Biopsychology (3)

Lab, one of the following:
PSYC 302L Laboratory in Learning and Memory (2)
PSYC 303L Laboratory in Sensation and Perception (2)
PSYC 304L Laboratory in Comparative Animal Behavior (2)
PSYC 305L Laboratory in Cognitive Psychology (2)
PSYC 306L Laboratory in Biopsychology (2)

MINOR IN PSYCHOLOGY (21 UNITS)

Lower Division (9 units)
PSYC 101 Introductory Psychology (3)
PSYC 201 Elementary Statistics (3)*
PSYC 202 Research Methods in Psychology (3)

Upper Division (6 units)
One of the following (3 units):
PSYC 302 Learning and Memory (3)
PSYC 303 Sensation and Perception (3)
PSYC 304 Comparative Animal Behavior (3)
PSYC 305 Cognitive Psychology (3)
PSYC 306 Biopsychology (3)

One of the following (3 units):
PSYC 331 Psychology of Personality (3)
PSYC 341 Abnormal Psychology (3)
PSYC 351 Social Psychology (3)
PSYC 361 Developmental Psychology (3)

Electives (6 units)

Special Requirements

Each course counted toward the minor must be completed with a grade of “C” (2.0) or higher. No more than a total of three units of PSYC 498 or 499 may be applied toward the minor. PSYC 496 may not be used toward the minor, but three units of this course may be counted toward units to graduate from the university. A minimum of 12 units counted toward the minor must have been completed in psychology at CSUF.

*Students who complete PSYC 201, or who have completed an articulated community college equivalent, take 6 units of upper-division electives. Alternatively, students may substitute for PSYC 201 a similar course in their major that is approved by the Psychology Department and take 9 units of upper-division electives.

MASTER OF ARTS IN PSYCHOLOGY (30 UNITS)

The degree program provides advanced coursework and research training in core areas of psychology. Completion of the M.A. can facilitate application to doctoral programs and provide skills important to careers in education, research, the health professions and industry.

Admission to Graduate Standing – Classified

Students must meet the CSU requirements for admission to a master’s degree program. Please consult the Graduate Admissions section in this catalog for complete information. In addition, applicants must meet the following requirements:

1. a 3.0 average in psychology coursework;
2. approved lower-division equivalent courses in psychology;
   - Introductory Psychology (e.g. PSYC 101)
   - Elementary Statistics (e.g., PSYC 201)
   - Research Methods in Psychology (e.g., PSYC 202)
3. approved upper-division equivalent coursework, including classes in history of psychology (e.g., PSYC 408) with a “B-” (2.7) or better (if history of psychology is not completed prior to entering the program it may be completed during the program); and advanced statistics (e.g., PSYC 465) with a “B-” (2.7) or better, completed prior to entering or within the first semester. Also, four additional psychology classes completed from the areas below; classes must be from four different areas and one must be a lab class;
- Learning and Memory
- Cognition/Information Processing
- Sensation and Perception/Physiological/Biological
- Social/Personality
- Abnormal/Clinical
- Developmental

4. satisfactory performance in the General (Verbal, Quantitative, Analytical) and Advanced Subject/Psychology tests of the Graduate Record Examination (GRE);
5. three satisfactory letters of recommendation. One must be from a psychology professor;
6. meet the University’s Writing Proficiency Requirement; and
7. empirical research (outside of coursework) supervised by a professor.

This may include independent study, honors thesis, etc.

Admission to the program is based on competitive evaluation of qualifications and is at the sole discretion of the Psychology Department’s Graduate Studies Committee. New students are admitted to the Master of Arts program in the fall only. Both the university and department applications must be completed on time for full consideration. The university application must be submitted online.

Departmental application forms may be obtained from hss.fullerton.edu/psychology/masterofarts.asp. The deadline for submitting applications and all supporting materials is March 1.

Admission to Graduate Standing – Conditionally Classified

It may be possible for an applicant with minimal deficiencies in prerequisite requirements, but who is otherwise highly qualified, to be admitted conditionally to the program. Provisions for the removal of these deficiencies would be outlined as part of the conditional acceptance. Deficiencies must be removed prior to granting classified standing. For further information, consult the graduate program adviser.

Study Plan

The Master of Arts in Psychology requires approved graduate work, including the completion and acceptance by the department of a written thesis that has been defended orally.

Each student, in consultation with the graduate coordinator, will develop a program of study. This program will be outlined on an official university study plan form and submitted to the department’s Graduate Studies Committee for review and approval. To be advanced to candidacy, students must receive a grade of “B-” (2.7) or better on all study plan courses and maintain a 3.0 grade point average overall.

Requirements for the M.A. in Psychology include the following:

500-Level Courses (15 units)
PSYC 500 Issues and Perspectives in Psychological Research (3)
PSYC 510 Experimental Design (3)

PSYC 599 Independent Graduate Research (3)
Two seminars from PSYC 520T Advanced Topics in Psychological Research (3,3)

400-level Content Courses (9-12 units)
Three 400-level psychology classes must be completed, each from a separate category:
- Applied Research
- Cognitive
- Social/Personality/Industrial
- Clinical
- Developmental
- Quantitative
- Sensory Processes/Physiological/Biological

- A list of qualifying classes for each category is available from the psychology graduate office.

Thesis (3-6 units)
PSYC 598 Thesis Research (3 or 3/3 units)

Students must complete PSYC 500 within their first semester in the program.

Following university regulations, a maximum of five years is normally allowed for completing degree requirements.

MASTER OF SCIENCE IN PSYCHOLOGY (60 UNITS)
CLINICAL

The Master of Science program combines training in scientific and applied areas of clinical psychology. It is based on the scientist-practitioner model. It prepares students for professional work in a variety of settings and for doctoral training in academic and professional programs in clinical psychology. The M.S. program provides supervised research and clinical fieldwork experience. It prepares the student for the Marriage, Family Therapy (MFT) and Licensed Professional Clinical Counselor (LPCC) licenses.

The M.S. Program accepts full-time students only. Part-time study is not possible. Students must complete coursework in the prescribed sequence. The program involves intensive fieldwork experience in clinical settings, emphasizing careful supervision, which includes weekly meetings with Psychology Department faculty and off-campus fieldwork supervisors.

Admission to Graduate Standing – Classified

Students must meet the CSU requirements for admission to a master’s degree program. Please consult the Graduate Admissions section in this catalog for complete information. Applicants are rarely admitted with less than a 3.0 overall grade-point average. In addition, applicants who meet the following requirements may be considered for classified graduate standing upon development of an approved study plan:
1. a 3.0 grade-point average in psychology;
2. the following courses, or equivalent;
   
   **Lower Division**
   
   PSYC 101 Introductory Psychology (3)
   PSYC 201 Elementary Statistics (3)
   PSYC 202 Research Methods in Psychology (3)
   
   **Upper Division**
   
   PSYC 341 Abnormal Psychology (3)
   PSYC 461 Psychological Testing (3) with a "B-" (2.7) or better (completed prior to admission or within the first semester)
   PSYC 465 Advanced Psychological Statistics (3) with a "B-" (2.7) or better (completed prior to admission or within the first year)

3. satisfactory performance on both the General and Advanced Psychology tests of the Graduate Record Examination;
4. three satisfactory letters of recommendation;
5. meet the university’s Writing Proficiency Requirement;
6. previous paid or volunteer work in a mental health setting, ideally supervised by a licensed clinician;
7. empirical research (outside of coursework) supervised by a professor. This may include independent study, honors thesis, etc.; and
8. completion of a selection interview.

New students are admitted to the Master of Science program in the fall only. Those admitted will be selected in the spring from the most qualified applicants at the sole discretion of the department’s Graduate Studies Committee. An interview of the finalists is required. In addition to the university application, a departmental application form, obtainable at hss.fullerton.edu/psychology/masterofscience.asp, must be completed.

University applications must be submitted online. The application deadline for submitting all materials, including GRE scores, is March 1. Incomplete applications will not be considered.

**Admission to Graduate Standing – Conditionally Classified**

It may be possible for applicants who have minimal deficiencies in the prerequisite requirements detailed above, but who are otherwise highly qualified, to be admitted with conditionally classified graduate standing. Provisions must be made for removal of deficiencies prior to the granting of classified standing. For further information, consult the graduate program adviser.

**Study Plan**

The Master of Science in Psychology requires approved graduate work, including the completion and acceptance by the department of a written thesis that has been defended orally.

Students, in consultation with their program adviser, shall develop a study plan that will be submitted to the Graduate Studies Committee of the Department of Psychology for approval. To be advanced to candidacy, students must receive a grade of “B-” (2.7) or better on all study plan courses and maintain a 3.0 grade point average overall.

**Core Courses (11 units)**

PSYC 501 Professional and Legal Issues in Clinical Psychology (3)
PSYC 510 Research Design (3)
PSYC 520T Advanced Topics in Psychological Research (3)
PSYC 599 Independent Graduate Research (2)

**Clinical Courses (28 units)**

PSYC 545 Advanced Psychopathology (3)
PSYC 547 Theories of Psychological Intervention (3)
PSYC 548 Psychotherapy Techniques (3)
PSYC 549 Marriage, Family and Child Therapy (3)
PSYC 560 Child and Adolescent Treatment (3)
PSYC 561 Clinical Psychological Assessment (3)
PSYC 568 Substance Abuse (1)
PSYC 569 Cross Cultural Psychology (3)
PSYC 594A Fieldwork (3)
PSYC 594B Fieldwork (3)

**Electives (15 units)**

Elective coursework must be approved by the Graduate Program Coordinator.

**Thesis (6 units)**

PSYC 598 Thesis Research (6)

Successfully completing coursework is not sufficient to permit continuation in the program. In addition, faculty judgment must be satisfied with respect to the student’s effectiveness and professional and ethical behavior in dealing with clients. Continuation in the program is contingent upon satisfactory performance in all aspects of the program as judged by the Graduate Studies Committee.

**PSYCHOLOGY COURSES**

Courses are designated as PSYC in the class schedule.

**101 Introductory Psychology (3)**

Basic concepts, problems and methods in psychology. Perception, learning, measurement, cognitive processes, development, motivation, personality, abnormal behavior, physiological and social psychology. Research participation required. It is recommended that students satisfy the ELM requirement before enrolling. One or more sections offered online.

**110 Critical Thinking in Psychology (3)**

Nature of critical thinking, models and strategies; common fallacies of reasoning, self-regulation in the thinking process; application of critical thinking to specific areas.
201 Elementary Statistics (3)
Prerequisites: PSYC 101 and completed ELM requirement. Descriptive statistics, probability, hypothesis testing (t, chi-square, F), sampling distributions of mean and variance, correlation and regression, analysis of variance (one-way, two-way, factorial design), interpreting data. Laboratory applications of statistical software to psychological data. (2 hours lecture, 3 hours laboratory)

202 Research Methods in Psychology (3)
Prerequisites: PSYC 101, 201 and completed ELM requirement, and completion of a General Education (G.E.)-certified college composition course. Fundamentals of psychological research methods. Participation in conducting experiments, analyzing data, interpreting results and writing research reports. (2 hours lecture, 3 hours laboratory)

300 Computer Applications in Psychology (3)
Prerequisites: completion of G.E. math requirement, PSYC 101, 201, 202. General introduction to the use of computers in psychology. Selection and use of application programs in research, statistics and testing will be emphasized. One or more sections offered online.

302 Learning and Memory (3)
Prerequisites: PSYC 101, 201, 202. Students taking PSYC 302L concurrently must also have completed PSYC 300. Theories and research in classical and operant conditioning, verbal learning, concept learning and processes of memory that underlie encoding, storage, retrieval and forgetting of information.

302L Laboratory in Learning and Memory (2)
Prerequisites: PSYC 101, 201, 202, 300. Pre- or corequisite: PSYC 302. Application of research methods to the study of topics in learning and memory. Empirical research will be designed, conducted, analyzed and interpreted. Written research reports required. (4 hours of laboratory).

303 Sensation and Perception (3)
Prerequisites: PSYC 101, 201, 202, 203. Students taking PSYC 303L concurrently must also have completed PSYC 300. Anatomical, neuroscientific and behavioral aspects of sensation and perception, mainly in humans. Covers all five senses: vision, hearing, touch, taste and smell.

303L Laboratory in Sensation and Perception (2)
Prerequisites: PSYC 101, 201, 202, 300. Pre- or corequisite: PSYC 303. Empirical research will be designed, conducted, analyzed and interpreted in the context of existing theories and findings in the areas of sensation and perception. Written research reports required. (4 hours of laboratory).

304 Comparative Animal Behavior (3)
Prerequisites: PSYC 101, 201, 202. Students taking PSYC 304L concurrently must also have completed PSYC 300. Human behavior in comparison with other animal species within an evolutionary context, including behavior genetics, sensory systems, development, communications, parental behavior, mating strategies, aggression and social organizations.

304L Laboratory in Comparative Animal Behavior (2)
Prerequisites: PSYC 101, 201, 202, 300. Pre- or corequisite: PSYC 304. Laboratory and field studies in animal behavior. Empirical research will be designed, conducted, analyzed and interpreted. Written research reports and field trips to local zoos required. (4 hours of laboratory).

305 Cognitive Psychology (3)
Prerequisites: PSYC 101, 201, 202. Students taking PSYC 305L concurrently must also have completed PSYC 300. Overview of current theories and research in cognitive psychology, cognitive neuroscience and cognitive science. Topics include perception and attention, imagery, memory, language, creativity, problem solving, reasoning and decision making. One or more sections offered online.

305L Laboratory in Cognitive Psychology (2)
Prerequisites: PSYC 101, 201, 202, 300. Pre- or corequisite, PSYC 305. Application of theoretical and experimental principles and findings in cognitive psychology. Empirical research will be designed, conducted, analyzed, interpreted and presented. Written research reports required. One or more sections offered online. (4 hours of laboratory).

306 Biopsychology (3)
Prerequisite: PSYC 101, 201, 202. Students taking PSYC 306L concurrently must also have completed PSYC 300. Topics in biopsychology, including anatomy of nervous system, neural activity, neurotransmitters, the synapse, sensory and motor systems, biological motives for eating, drinking, sexual reproduction and sleep, neurology of brain damage and mental illnesses, and drug effects/addiction in the brain.

306L Laboratory in Biopsychology (2)
Prerequisites: PSYC 101, 201, 202, 300. Pre- or corequisite: PSYC 306. The mammalian brain. Empirical research in biopsychology will be designed, conducted, analyzed and interpreted. Written research reports required. (4 hours of laboratory).

310 Psychology of Gender (3)
Prerequisites: PSYC 101. Psychological research, theories and issues related to gender differences and similarities, emphasizing psychological characteristics and problems of women and men, and on relationships between and within genders.
311 Educational Psychology (3)
Prerequisite: PSYC 101. Application of psychological research and theory to educational processes, including learning, motivation, individual differences, teaching methods and evaluation. Recommended for those interested in teaching careers.

312 The Psychology of Human Sexual Behavior (3)
Prerequisite: PSYC 101. Topics in human sexual behavior integrating biological, social, clinical and developmental aspects of sexuality. Surveys and statistics of sexual behavior, sexual orientation, gender identity, sexual variations, causes and treatment of sexual dysfunctions. Legal, moral and social issues.

317 Psychology and Law (3)
Prerequisite: PSYC 101. Impact of social scientific evidence on the legal system. Issues and cases related to the death penalty, memory as evidence, police interrogations and false confessions, jury decision-making, pretrial publicity, detecting deception and the insanity defense.

322 Psychology of African Americans (3)
(Same as AFAM 322)

331 Psychology of Personality (3)
Prerequisite: PSYC 101. Research, theory and assessment techniques in the area of personality. One or more sections offered online.

341 Abnormal Psychology (3)
Prerequisite: PSYC 101. Symptoms, causes, treatment and prevention of mental problems; anxiety disorders, personality disorders, psycho-physiological disorders, psychoses, substance use disorders, sexual disorders and organic disorders. One or more sections offered online.

346 Asian American Psychology (3)
(Same as ASAM 346)

351 Social Psychology (3)
Prerequisite: PSYC 101. How people think about, influence and relate to one another. Topics include social perception and cognition, attitudes and attitude change, attraction, altruism, aggression, interpersonal influence and group processes.

361 Developmental Psychology (3)
Prerequisite: PSYC 101. Theories, methods and research findings regarding physical, cognitive and psychosocial human development, including such topics as perception, learning, intelligence and personality.

362 Psychology of Aging (3)
Prerequisite: PSYC 101. Characteristics of humans during the adult years. Topics include physical, intellectual, cognitive, personal, social and psychological development, vocational and family changes, retirement and death.

371 Evolutionary Psychology (3)
Prerequisite: PSYC 101. Evolutionary origins and function of human behavior and psychology. Applying evolutionary perspectives to a broad range of topics, including cooperation, conflict, mating strategies, social exchange, jealousy and parenting.

391 Industrial/Organizational Psychology (3)
Prerequisite: PSYC 101. Human behavior in the workplace. Traditional and current psychological principles applied to industrial, organizational and business settings. Selection, placement, training, work motivation, human factors, environmental influences, leadership, work stress, workplace violence, organizational communication, organizational development and consumer behavior.

408 History of Psychology (3)
Prerequisites: one of the following: PSYC 302, 303, 304, 305 or 306; and two of the following: PSYC 331, 341, 351, 361. Development of psychology from early times to the present; major traditions and conceptual issues.

414 Cognitive Neuroscience (3)
Prerequisites: PSYC 305 and 306, or consent of instructor. Human cognitive behavior as a brain-based activity: Methodology of Cognitive Neuroscience, functional neuroanatomy and their relationships to perception, attentional encoding and control mechanisms, memory, emotion, language and consciousness.

415 Cognitive Processes (3)
Prerequisite: PSYC 302, 303 or 305. Advanced treatment of theory and research in such topics as attention, pattern recognition, memory, knowledge representation, language, decision-making, judgment, reasoning and problem solving.

417 Psycholinguistics (3)
Prerequisite: six hours of upper-division work in psychology or linguistics. Theory and research on the psychological processes that make possible language acquisition and use. Three major concerns are: comprehension of spoken and written language; speech production; and language acquisition. (Same as LING 417)

421 Psychology of Immigration (3)
Prerequisites: Nine hours of upper-division psychology coursework. Psychological theory and research on the topic of immigration. Impact of immigration on individual development and family functioning in immigrants from a variety of ethnic backgrounds.

430 A Social Psychological Study in Ethnic Minority Behavior (3)
(Same as AFAM 430)

431 Theories of Personality (3)
Prerequisite: PSYC 331. Traditional and contemporary theories of personality, including psychoanalytic, humanistic-existential, behavioral, trait and social interaction approaches.
456 The Psychological Study of Lesbian, Gay and Bisexual Experiences (3)
Prerequisites: PSYC 101 and three upper-division psychology courses. Introduces the scientific study of individuals who identify as lesbian, gay or bisexual. Major themes include: identity development and disclosure; social and gender roles; stigma; minority stress; same-sex relationships; and parenting.

461 Psychological Testing (3)
Prerequisites: PSYC 201, 202, 300 and senior status (completion of 90 or more units). Intelligence, aptitude, interest and personality testing. Theory, construction, evaluation, interpretation and uses of psychological tests.

462 Advanced Psychology of Aging (3)
Prerequisite: PSYC 362 or graduate standing. Concepts and controversies in the field of gerontological psychology and the societal implications of an aging population. Review and analyze current literature, focusing on the physiological, psychological and social changes that accompany old age. (Same as GERO 462)

464 Advanced Developmental Psychology (3)
Prerequisites: PSYC 202, CAS 301, 312 or PSYC 361. Review and analyze major theoretical, empirical and applied issues in developmental psychology.

465 Advanced Psychological Statistics (3)
Prerequisites: PSYC 201, 202 and 300. General linear model, regression, analysis of variance techniques and applications to research design and evaluation of data.

466 Advanced Social Science Computer Applications (3)
Prerequisites: PSYC 201 and 300 or equivalent. Advanced computer applications focusing on topics such as web page development, data analysis, graphing, data bases and online experimentation and data collection.

467 Multivariate Statistics for Psychology (3)
Prerequisite: PSYC 465. Multivariate analysis of variance, profile analysis, discriminate analysis, factor analysis, cluster analysis, multidimensional scaling, introduction to structural equations and hierarchical linear models, and applications to psychological research.

473 Sleep, Dreams, and Behavior (3)
Prerequisites: PSYC 306, 331, 341. Role of sleep and dreams in controlling awake behavior. Topics include historical views/ theories, the neurobiology of sleep and dreams, sleep-wake schedules, sleep disorders, and their relationships to cognitive, personality and psychopathology.

474 Health Psychology (3)
Prerequisites: PSYC 101 and completion of nine units of upper-division psychology courses. Role of psychology in prediction, prevention and treatment of medical disorders, including stress and illness, psycho-neuro-immunology, psychological aspects of chronic illnesses, behavioral medicine, physician-patient dynamics.

475 Psychopharmacology (3)
Prerequisites: PSYC 306 and 341. Basic neurophysiological principles of pharmacokinetics and pharmacodynamics that underlie the effects of drugs on experience and behavior. Recreational drugs and abused drugs that can contribute to psychological disorders. Psychological, medical and social implications of pharmacotherapy.

480M MARC Proseminar (1)
(Same as BIOL 480M)

481 Survey of Clinical Psychology (3)
Prerequisite: PSYC 341. Methods, diagnosis, therapeutic techniques, research, educational requirements, professional requirements, ethics, graduate school preparation, choosing graduate programs.

495 Field Placement in Psychology (3)
Prerequisites: nine units of 300-level psychology courses completed at CSUF by the time of course registration, and 2.0 GPA in psychology courses. Supervised experience in which psychological principles or methods are applied in a fieldwork setting. Mandatory class meetings to discuss and write about experiences of integrating psychological theory with practice. Required of majors. One or more sections offered online. May be repeated once for credit.

496 Student-to-Student Tutorials (1-3)
Consult "Student-to-Student Tutorials" in this catalog for more complete course descriptions.

498 Directed Empirical Research (1-3)
Prerequisites: completion of one upper-division laboratory course in psychology and consent of instructor. Study plan must be approved by university census date. Individual laboratory investigation under direction of a faculty member. No more than three units of credit toward the major.

499 Directed Library Research (1-3)
Prerequisites: completion of at least one upper-division laboratory course in psychology and consent of instructor. Study plan must be approved by university census date. Individual library study under direction of a faculty member. No more than three units of credit toward the major.

500 Issues and Perspectives in Psychological Research (3)
Prerequisites: admission to the psychology graduate program and consent of instructor. Current theoretical, professional and methodological issues in psychology.
501 Professional and Legal Issues (3)  
Prerequisite: admission to the M.S. Psychology (Clinical) program. Introduction to methodological, ethical and legal issues in the field of Clinical Psychology.

510 Research Design (3)  
Prerequisites: PSYC 201, 465 and admission to a psychology graduate program. Principles and methods of planning and carrying out systematic psychological research, interdependence of research design and statistical evaluation of results. Practice in formulation of testable hypotheses.

520T Seminar: Advanced Topics in Psychological Research (3)  
Prerequisite: admission to a psychology graduate program. Content of seminar may vary each semester. A topic is selected for in-depth study from one or more specialty areas within the field of psychology. May be repeated for credit.

545 Advanced Psychopathology (3)  
Prerequisites: PSYC 341 or equivalent and admission to either the M.S. Psychology (Clinical) program or the M.A. Psychology program. In-depth study of diagnosis, etiology theories, research and prevention of adult and child psychopathology.

547 Theories of Psychological Intervention (3)  
Prerequisite: admission to M.S. Psychology (Clinical) program. In-depth coverage of psychotherapy. Principle theoretical approaches covered are: psychodynamic, humanistic, and behavioral/cognitive behavioral.

548 Psychotherapy Techniques (3)  
Prerequisite: satisfactory completion of first semester of M.S. Psychology (Clinical) program. Skills course in conducting diagnostic interviews and basic therapeutic techniques. Role playing and video feedback. (2 hours lecture, 3 hours laboratory)

549 Marriage, Family and Child Therapy (3)  
Prerequisite: completion of first year in M.S. Psychology (Clinical) program. Marriage, family and child therapy: theory, techniques and research.

550 Group Psychotherapy (3)  
Prerequisite: admission to M.S. Psychology (Clinical) program. Role of interpersonal learning and communication in behavior change and skill development in group psychotherapy. Lecture, discussion, role plays and videos will focus on psychoeducational groups in an ethical and diversity-sensitive framework.

560 Child and Adolescent Treatment (3)  
Prerequisite: satisfactory completion of the first semester of the M.S. Psychology (Clinical) program. Specific therapy techniques, including behavioral, and general approaches to the treatment of children and adolescents.

561 Clinical Psychology Assessment (3)  
Prerequisites: PSYC 461 and admission to the M.S. Psychology (Clinical) program. Theory, administration, scoring and interpretation of measures of intelligence and objective personality inventories.

568 Substance Abuse (1)  
Prerequisite: admission to the graduate program. Impact of alcoholism and drug abuse on the individual, family and community; clinical skills in the diagnosis and treatment of substance abuse; and research on diagnosis and outcome.

569 Cross-Cultural Psychology (3)  
Prerequisites: PSYC 545, 547. In-depth study of cross-cultural issues as they apply to clinical psychology, specifically psychotherapy. Practical, research and theoretical issues.

594A Fieldwork (3)  
Prerequisite: satisfactory completion of first year's work in the M.S. Psychology (Clinical) program. Supervised clinical work in mental health agencies. Must be taken for a letter grade (may be repeated by third-year students; repetition will not count toward study plan units and should be taken credit/no credit). (Minimum of 12 hours field experience per week.)

594B Fieldwork (3)  
Prerequisite: satisfactory completion of first year's work in the M.S. Psychology (Clinical) program. Supervised clinical work in mental health agencies. Must be taken for a letter grade (may be repeated by third-year students; repetition will not count toward study plan units and should be taken credit/no credit). (Minimum of 12 hours field experience per week.)

598 Thesis Research (3 or 6)  
Prerequisites: formal advancement to candidacy and consent of instructor. Supervised individual major research project, written as a thesis and presented and defended successfully to a faculty thesis committee.

599 Independent Graduate Research (1-3)  
Prerequisites: admission to a psychology graduate program and consent of instructor. Empirical research in a selected area of psychology. Designed, conducted and written by the student with the collaboration of a member of the faculty. May be repeated for credit.