GRADUATE COURSE DESCRIPTIONS (PSY)

PSY

Psychology

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, Letter graded (A, A-, B+, etc.)

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. Spring
3 credits, Letter graded (A, A-, B+, etc.)

PSY 504: First Year Seminar
This course includes discussion of current research and research practices by faculty and visiting speakers. This course is required of all first-year Ph.D. students and Masters students. 0-3 credits, S/U grading May be repeated for credit.
0-3 credits, S/U grading
May be repeated for credit.

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, Letter graded (A, A-, B+, etc.)

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 methods 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, Letter graded (A, A-, B+, etc.)

PSY 507: Meta-Analysis
This course is an introduction to research synthesis and the use of meta-analytic techniques. The content is intended to be a thorough yet practical coverage of basic principles, with an emphasis on leading students through the steps of conducting their own meta-analytic project. A basic knowledge of statistics commonly used in the social and behavioral sciences is essential. Class meetings will involve both didactic instruction and discussion of readings and homework assignments.
3 credits, Letter graded (A, A-, B+, etc.)

PSY 508: Introduction to Computer Applications in Statistics
Computer protocol and introduction to statistical packages and necessary utility programs. 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, 3 credits, Letter graded (A, A-, B+, etc.)

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, 3 credits, Letter graded (A, A-, B+, etc.)

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 neuorcomputational 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, Letter graded (A, A-, B+, etc.)

PSY 514: Sensation and Perception
This course covers the sensory mechanisms 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, Letter graded (A, A-, B+, etc.)

PSY 516: Judgment and Decision Making
This course provides an overview of empirical and theoretical work on judgment and decision making. Topics include what decision making is, Fall or Spring, 3 credits, Letter graded (A, A-, B+, etc.)

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, 3 credits, Letter graded (A, A-, B+, etc.)

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, 3 credits, Letter graded (A, A-, B+, etc.)

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, 3 credits, Letter graded (A, A-, B+, etc.)

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, 3 credits, Letter graded (A, A-, B+, etc.)**

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**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, Letter graded (A, A-, B+, etc.)**

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**PSY 535: Advanced Research Methods**

Advanced research methods employed in clinical, personality, social, and behavioral research. Fall or Spring

**3 credits, Letter graded (A, A-, B+, etc.)**

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**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.

**Fall, 3 credits, Letter graded (A, A-, B+, etc.)**

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**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, and 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.

**Spring, 3 credits, Letter graded (A, A-, B+, etc.)**

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**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, Letter graded (A, A-, B+, etc.)**

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**PSY 542: Psychology of Addictive Behaviors**

Study of psychological, behavioral and biological theories of addiction.

**Fall or Spring, alternate years, 3 credits, Letter graded (A, A-, B+, etc.)**

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**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, Letter graded (A, A-, B+, etc.)**

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**PSY 544: Emotion & Cognition**

This course focuses on fundamental questions regarding the interaction between emotion and cognition, and how such 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, Letter graded (A, A-, B+, etc.)**

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**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.

**Fall, 2 credits, Letter graded (A, A-, B+, etc.)**

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**PSY 546: Measurement and Scaling**

An 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, 3 credits, Letter graded (A, A-, B+, etc.)**

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**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, Letter graded (A, A-, B+, etc.)**

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**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, 3 credits, Letter graded (A, A-, B+, etc.)**

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**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 judgements, and interpersonal behaviors. Coursework focuses on identifying basic principles that transcend particular content domains.

**Fall or Spring, alternate years, 3 credits, Letter graded (A, A-, B+, etc.)**

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**PSY 556: Stress and Coping**

In this course, we examine current issues, challenges, and questions in two related areas of psychology: stress and coping. We will cover classical approaches in addition to recent empirical research and theoretical development. Students are not expected to have prior familiarity with the topic areas. We will begin by reviewing definitions and major theoretical orientations. In subsequent weeks we will concentrate on issues relevant to stress, coping, and related topics such as social support, across a broad range of circumstances, rather than focusing on specific stressful contexts such as chronic illness or bereavement. For example, we will examine ways to define successful and maladaptive coping. We will also consider whether social support is better conceptualized as a commodity or as an individual perception. We
will compare contradictory evidence about the benefits of perceived control, and we will
discuss problems of generalizing research
findings to different ethnic, cultural, and other
groups.
Offered: Fall, Spring alternate years, 3 credits,
Letter graded (A, A-, B+, etc.)

PSY 560: Cognitive Neuroscience
Cognitive neuroscience is an interdisciplinary
field, at the interface of systems neuroscience,
computational neuroscience, and cognitive
psychology. In this course, we examine
the current theories and empirical research
findings on the neural basis of cognition. We
will cover anatomical, neurophysiological
and pharmacological correlates of behavioral
functions such as perception, attention,
motivation, learning, memory, cognitive
control, and communication. We will
evaluate the strengths and weaknesses of
various approaches used to student the neural
substrates of higher-order cognition.

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 illustrated.
The course proceed to cover neural metabolism,
and its relation to disorders of memory and
motor dysfunction. Last, stress and its role in
neuropsychological disorders is discussed.

Fall, 3 credits, Letter graded (A, A-, B+, etc.)

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, Letter graded (A, A-, B+, etc.)

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, 3 credits, Letter graded (A, A-, B+, etc.)

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.

Fall, 0-3 credits, S/U grading

PSY 565: Functional Neuroanatomy
Just as a function can be derived from
the structure of everyday objects, so too
function can be derived from the study of
brain architecture and neural connectivity.
Accordingly, this course takes a structural
approach to the understanding of the nervous
system and behavior. To complement a
disciplinary focus on cognition, affect and
emotions, this course will emphasize the
connectivity of higher order brain regions.
Students will first be introduced to the global
organization of the nervous system and a
general framework for information processing.
Then sensory and motor pathways will be
discussed in more detail. The course will
end with topics such as the neuromodulation of
addiction, emotion, and memory.

Offered
Spring, 3 credits, Letter graded (A, A-, B+, etc.)

PSY 551: Integrative Neuroscience
Seminar I
This course includes discussion of current
research in Integrative Neuroscience by
faculty, students, and visiting scientists. This
sequence is required of all students in the
Integrative Neuroscience Program.
Fall, 0-3 credits, S/U grading

PSY 552: Integrative Neuroscience
Seminar II
This course includes discussions of current
research in Integrative Neuroscience by
faculty, students, and visiting scientists. This
sequence is required of all students in the
Integrative Neuroscience program.
Spring, 0-3 credits, S/U grading

PSY 553: Cognitive Science Seminar I
This course includes discussions of current
research in Cognitive Science by faculty,
students, and invited scientists. This sequence
is required of all students in the Cognitive
Science program.
Fall, 0-3 credits, S/U grading

PSY 554: Cognitive Science Seminar II
This course includes discussions of current
research in Cognitive Science by faculty,
students, and invited scientists. This sequence
is required of all students in the Cognitive
Science program.
Spring, 0-3 credits, S/U grading
**PSY 585: Social and Health Psychology Seminar I**
This course includes discussions of current research in Social and Health Psychology by faculty, students, and visiting scientists. This sequence is required of all students in the Social and Health Psychology Program.
*Fall, 0-3 credits, S/U grading*
*May be repeated for credit.*

**PSY 586: Social and Health Psychology Seminar II**
This course includes discussions of current research in Social and Health Psychology by faculty, students, and visiting scientists. This sequence is required of all students in the Social and Health Psychology Program.
*Spring, 0-3 credits, S/U grading*
*May be repeated for credit.*

**PSY 587: Clinical Psychology Seminar I**
This course includes discussions of current research in Clinical Psychology by faculty, students, and visiting scientists.
*Fall, 0-3 credits, S/U grading*
*May be repeated for credit.*

**PSY 588: Clinical Psychology Seminar II**
This course includes discussions of current research in Clinical Psychology by faculty, students, and visiting scientists.
*Spring, 0-3 credits, S/U 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, Letter graded (A, A-, B+, etc.)*

**PSY 595: Human Development**
An examination of the biological and psychological development of children and adolescents and its relationship to teaching and curriculum development for diverse learners. The course will focus on special education programs, childhood and adolescent psychiatric disorders, and societal issues.
*Offered: Fall, Spring, 3 credits, Letter graded (A, A-, B+, etc.)*

**PSY 596: Psychopathology: Externalizing & 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, Letter graded (A, A-, B+, etc.)*

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.
*Spring, 2 credits, Letter graded (A, A-, B+, etc.)*

**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 Psychology Graduate 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**
Clinical Psychology faculty meet with students as a group with follow-up individual recitation sessions to cover topics such as assessment and treatment conceptualization of specific cases that students are seeing in Psychological Center. In addition, methods of providing documentation of change in individual cases are discussed as well as means of obtaining corroborating evidence to support self-reported information. Students present case material to the group and receive peer and faculty feedback about case conceptualization and treatment.
*Prerequisite: Clinical psychology doctoral student*
*Summer, 3 credits, S/U grading*
*May be repeated for credit.*

**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*
*May be repeated for credit.*

**PSY 610: Seminars in Selected Topics**
Topics 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, Letter graded (A, A-, B+, etc.)*
*May be repeated for credit.*

**PSY 620: Seminars in Selected Topics**
Topics 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, Letter graded (A, A-, B+, etc.)*
*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, Letter graded (A, A-, B+, etc.)*
*May be repeated for credit.*

**PSY 695: Graduate Academic and Professional Skills Practicum**
Students enrolled in the M.A. program in Psychology may gain degree-relevant practical experience under the supervision of the program advisor. This experience may include participation in public and private agencies and organizations and experience in teaching support roles. Students are required to submit written progress reports and a final written report on their experience to the faculty sponsor and department.
Offered
*Fall, Spring, and Summer, 1-6 credits, S/U 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 SBU campus, at Cold Spring Harbor, or at the Brookhaven National Lab.*
*Fall, 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 United States and/or U.S. provinces. Please note, Brookhaven National Labs and the 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, 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 United States 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 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 second week of classes. The charge will only be removed if other plan is deemed comparable.
*All international students must receive clearance from an International Advisor.*
*Fall, Spring, 1-9 credits, S/U grading*

May be repeated for credit.

**PSY 800: Full Time Summer Research**
0 credits, S/ grading
*S/U grading*
*May be repeated for credit.*

**PSY 820: Summer Teaching-CED**