

Psychology

Website: psychology.sewanee.edu

Psychology is a diverse discipline that borders on the biological and social sciences. It is at once a science and a means of promoting human welfare. Reflecting its historical roots in philosophy, physiology, and clinical practice, it embraces a variety of theoretical perspectives, methodologies, and areas of study. The Department of Psychology at Sewanee provides majors and non-majors with the basic principles of psychology within the context of a liberal arts education. Our curriculum emphasizes scientific thinking and equips majors with multiple perspectives and research methods with which to understand behavior and mental processes. Graduates of our program pursue advanced study and careers in a variety of areas, including psychology (e.g., industrial, developmental, clinical, school), other helping professions (e.g., social work, physical therapy), and other fields (e.g., law, medicine, education, business).

The psychology major combines a broad grounding in psychology with opportunities for depth in selected areas. Majors in psychology begin with one introductory course: an introduction to empirical psychology, organized topically. This course has a full laboratory component focused on the process of scientific inquiry, giving students experience with a variety of research approaches and methodological issues. A course in research methodology prepares students to design and carry out research. Students also choose survey, seminar, and upper-level laboratory courses in areas such as abnormal, behavior modification, cognitive, developmental, gender, industrial, personality, physiological, and social psychology. Within the major, students choose upper-level courses according to individual interests.

Advanced students may study independently or conduct research under faculty supervision, work as laboratory assistants, or aid faculty members with research. Students have presented their research at Scientific Sewanee and at professional psychology conferences. Summer internships are available through the Tonya program for those who are interested in gaining experience in business or public service. For those students planning to do graduate work in psychology, STAT 204 is highly recommended.

Faculty

Associate Professors Bardi (Chair), Bateman, Hamby, West

Professor Yu

Assistant Professors Cammack, J. Coffey, H. Craft, Jesurun, Nelson, Noffsinger-Frazier, Tiernan, Troisi

Instructor B. Craft

Major

Requirements for the Major in Psychology

The major (both B.A. and B.S.) requires successful completion of the following:

Course Requirements

PSYC 101 or PSYC 100	Principles of Psychology or Introduction to Psychology (Lab)	4
PSYC 251	Research Methods and Data Analysis	4
Select one of the following:		4
PSYC 201	Psychology of Personality	
PSYC 202	Abnormal Behavior	
PSYC 203	Social Psychology	
Select one of the following: ¹		4
PSYC 208	Cognitive Psychology	
PSYC 254	Introduction to Behavioral Neuroscience	
PSYC 358	Cognitive Psychology (Lab)	
Select one of the following: ¹		4
PSYC 206	Industrial Psychology	
PSYC 214	The Psychology of Eating Disorders and Obesity	
PSYC 221	Adolescence	
PSYC 222	Adult Development and Aging ²	
PSYC 223	Positive Psychology	
PSYC 227	Health Psychology	

PSYC 230	Child, Family, and Community Development in Rural Appalachia ²	
PSYC 280	Psychology of Human Diversity	
PSYC 356	Research in Social Psychology (Lab)	
PSYC 357	Child Development (Lab) ²	
PSYC 402	Community Psychology	
PSYC 403	Psychology and Popular Culture in the U.S.	
PSYC 406	Psychobiography	
PSYC 408	Seminar in Abnormal Behavior	
PSYC 412	Psychology of Gender	
PSYC 413	The Self-Concept and Self-Esteem	
PSYC 415	Relationships and Health	
PSYC 416	Attachment Theory: Development, Well-being, and Risk for Psychopathology	
PSYC 480	Language, Literacy, and Play ³	
PSYC 482	Emotional Intelligence ³	
PSYC 484	Autism and Related Disorders ³	
Select one of the following: ¹		4
BIOL 490	Principles of Neuroscience ³	
BIOL 492	History of Modern Neuroscience ³	
PSYC 217	Motivation and Cognitive Control	
PSYC 222	Adult Development and Aging ²	
PSYC 349	Drugs and Behavior	
PSYC 355	Affective Neuroscience (Lab)	
PSYC 357	Child Development (Lab) ²	
PSYC 359	Advanced Behavioral Neuroscience (Lab)	
PSYC 410	Cognitive Illusions	
PSYC 411	Judgment and Decision-Making	
PSYC 414	The Social Brain	
PSYC 417	Seminar in Developmental Psychology: Human Development in Context	
PSYC 420	Consciousness and Unconsciousness	
PSYC 481	Introduction to Cognitive Science ³	
PSYC 483	Cognitive Neuroscience ³	
PSYC 490	Principles of Neuroscience ³	
PSYC 491	Neurobiology of Emotion ³	
PSYC 492	History of Modern Neuroscience ³	
PSYC 493	Research Topics in Emotion and Cognitive Control ³	
Select four additional courses in psychology (PSYC) ⁴		16
Total Semester Hours		40

Additional Requirements

A comprehensive examination ⁵

- ¹ One course must be an advanced lab (PSYC 355, PSYC 356, PSYC 357, PSYC 358, PSYC 359), and one course must be a seminar (PSYC 230, PSYC 402, PSYC 403, PSYC 406, PSYC 408, PSYC 410, PSYC 411, PSYC 412, PSYC 414, PSYC 415, PSYC 416, PSYC 420).
- ² Students may count PSYC 222 and PSYC 357 in only one group.
- ³ Courses available at Yale to students accepted to the Sewanee-at-Yale Directed Research Program.
- ⁴ Majors who take the minimum ten psychology courses may count only one PSYC 444 toward their major; psychology majors who take more than ten psychology courses may count two PSYC 444 courses toward their major.
- ⁵ The comprehensive examination consists of a paper that integrates material from three areas in psychology. Ordinarily several possible questions are distributed in January with a mandatory outline submitted in February. The paper is due during the second comprehensive examination period for Easter semester.

Honors

Departmental honors are awarded based on distinguished work in psychology during the undergraduate career. Individuals with a cumulative psychology GPA below 3.60 are considered only under extraordinary circumstances. Unlike the college-wide honors (cum laude, magna cum laude, summa cum laude), the decision involves consideration of other factors besides GPA, particularly the quality of any additional intellectual accomplishments in psychology such as independent research, conference presentations, and internships.

Minor

Requirements for the Minor in Psychology

The minor requires successful completion of the following:

Course Requirements ¹

PSYC 100	Introduction to Psychology (Lab)	4
or PSYC 101	or Principles of Psychology	
Select one additional course in psychology (PSYC) numbered 300 or above ²		4
Select four additional courses in psychology (PSYC) ²		16
Total Semester Hours		24

¹ All courses must be taken for grades (not P/F).

² PSYC 444 may count as one of the four courses, but it does not satisfy the requirement of one course numbered 300 or above.

Off-Campus Study

Sewanee-at-Yale Directed Research Program

During summer internships over more than ten years, undergraduates from Sewanee have spent six to eight weeks working in a research laboratory at the Yale Child Study Center in New Haven, Connecticut. Through this experience, students have been exposed to research in a clinical setting and to the day-to-day workings of a behavioral neuroscience research laboratory. They have worked with school-aged children participating in developmental studies, administered developmental and cognitive assessments, and learned about database management. Over the summer months, only a small number of students have had sufficient time to complete a small project from the steps of gathering data to completing the analysis and writing a research manuscript. The Sewanee-At-Yale Directed Research Program is intended to provide directed research experience for Sewanee students who wish to be exposed to an active developmental and behavioral neuroscience research laboratory in a medical school setting and to have the experience of carrying through a directed research project in greater depth over a somewhat longer time frame. Although participation in the program is not restricted by year or major, we expect it will be particularly appealing to students majoring in biology or psychology and to pre-medical students with other majors; participation during the junior or senior year is generally recommended.

During their time at Yale, students will typically work on one or more research projects, participate in weekly research meetings, and participate in a research methods seminar and at least one upper-level seminar offered by the Child Study Center. Each student will be sponsored by a Sewanee faculty member, who will serve as advisor, set the requirements, and assist the student in developing a written plan of study. The student should work collaboratively with his or her Sewanee faculty advisor, the directors of the program at Sewanee and at the Yale Child Study Center, and any other designated Yale faculty mentors to insure that the written plan of study can feasibly be completed at the Child Study Center. Normally, the minimum final requirement for the program will be a written report of the completed research; individual faculty advisors may set alternative equivalent requirements.

For any given student, the typical program duration will be one semester plus a summer, in either order. During their time New Haven, students are expected to be involved in data gathering and data analysis. The written report of the work could be completed in New Haven, or after leaving New Haven while maintaining active contact with the program director and other faculty mentors at the Child Study Center. More information about the program is available at: sewanee.edu/academics/psychology/programs/sewanee-at-yale-directed-research-program.php.

To be accepted into the program, students typically complete the following:

Psychology Majors

PSYC 251	Research Methods and Data Analysis
PSYC 254	Introduction to Behavioral Neuroscience
or PSYC 357	or Child Development (Lab)

Biology Majors

BIOL 130	Field Investigations in Biology
BIOL 133	Introductory Molecular Biology and Genetics

Other Majors

Select two of the following:

BIOL 130	Field Investigations in Biology
BIOL 133	Introductory Molecular Biology and Genetics
PSYC 251	Research Methods and Data Analysis
PSYC 254	Introduction to Behavioral Neuroscience
PSYC 357	Child Development (Lab)

Courses**Psychology Courses****PSYC 100 Introduction to Psychology (Lab) (4)**

An introduction to empirical psychology, organized topically. Key areas, approaches, and theories in psychology are illustrated. Depending on their interests, instructors choose several topics such as the psychology of sex and gender, conformity and obedience, and aggression and violence. Weekly laboratory sessions focus on the process of scientific inquiry, giving students experience with a variety of research approaches and methodological issues. Not open for credit to students who have received credit for PSYC 101 or for a 100-level psychology course taken at another university.

PSYC 101 Principles of Psychology (4)

An intensive examination of key areas, approaches, theories, and research methodology in empirical psychology. Designed, in conjunction with PSYC 251, to provide a strong introduction to the field for students intending to major in psychology. Not open to students who have received credit for PSYC 100 or for a 100-level psychology course taken at another university. Non-laboratory course.

PSYC 201 Psychology of Personality (4)

A survey of classical and contemporary psychological approaches to the study of personality, including trait, psychodynamic, neuropsychological, behavior genetic, evolutionary, learning, phenomenological, cultural, and cognitive. Students apply theoretical concepts and examine research associated with these approaches, considering multiple sources of data (e.g., self-report, behavioral observation) and a variety of empirical methods (e.g., psychometric assessment, content analysis). *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 202 Abnormal Behavior (4)

A study of abnormal and clinical psychology from a scientist-practitioner perspective, including DSM-IV-TR diagnostic criteria, assessment measures and strategies, treatment modalities, case studies, and ethical issues. Major theoretical paradigms and research on etiology, diagnosis, and treatment of psychopathology are presented and discussed. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 203 Social Psychology (4)

An examination of the impact that social influences have on individual behavior. The course examines major theories and empirical evidence in a variety of areas, such as interpersonal attraction, attitude change, group behavior, conformity, prejudice, and altruism. Students examine empirical methods used in social psychology and gain experience by designing and conducting studies examining questions of their choosing and then presenting the results. Not open for credit to students who have received credit for PSYC 356. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 206 Industrial Psychology (4)

Explores the application of psychological theories and research to business and industry. Studies how human abilities (visual, auditory, tactile, physical strength) are used in planning for equipment and procedures that optimize man/machine interactions in a technological society; employee selection, training, and motivation; corporate culture; consumer behavior. *Prerequisite: PSYC 100 or 101 or junior standing.*

PSYC 208 Cognitive Psychology (4)

An introduction to the study of cognitive processes such as attention, memory, language, and reasoning. Students consider empirical findings from a variety of methodologies as well as the methodologies themselves. Broader issues such as unconscious processes and cultural differences in cognition are also examined in this context. Students are encouraged to discover applications of findings in cognitive psychology to other areas of psychology, other disciplines, and their everyday lives. Not open for credit to students who have completed PSYC 358. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 213 Comparative Sexual Behavior (4)

A survey and critical evaluation of research investigating the psychological and social factors in sexual behavior with some attention to the underlying biology. A comparison and contrast across species, across individuals, and across cultures. Topics include partner preference, sexual dysfunction and treatment, changes across the life span, and commercial sex. Readings include selections from works that have changed the American understanding of sexual behavior. *Prerequisite: PSYC 100 or 101 or junior standing.*

PSYC 214 The Psychology of Eating Disorders and Obesity (4)

An examination of the etiology of eating disorders and obesity, derived from the empirical literature and with consideration of psychological, neurobiological, and sociocultural explanations for such disorders. The course critically evaluates primary research literature concerning risk factors for developing documented eating disorder (anorexia nervosa, bulimia nervosa, binge eating disorder), as well as newly proposed diagnostic categories (e.g., orthorexia). A multicultural perspective is emphasized, and the relation of disordered eating to issues such as socio-economic status, race and ethnicity, and gender is addressed. Multiple theoretical explanations for disordered eating—including psychodynamic, family systems, cognitive, relational-cultural, and behavioral theories—are critically examined. Empirically validated treatments and standardized prevention programs are also introduced and critiqued. Students conduct research using archival data to investigate specific risk and protective factors in the dev. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 217 Motivation and Cognitive Control (4)

This course examines the neural basis of motivation-cognition interactions and processes that regulate thought, action, and goal-directed behavior. Students explore a number of cognitive processes that are enhanced by the presence of motivational incentives (e.g., memory, attention, inhibition, rewards, emotion, decision making).

PSYC 218 Psychology of Violence (4)

Explores the application of psychological theories and research to the major forms of violence. Such forms include youth violence, family violence, bullying, suicide, homicide, workplace violence, war, and ethnic conflict. The course reviews and critiques major etiological models including social cognitive, behavioral, and physiological. It also presents current major models of prevention and treatment, including psycho-educational, cognitive-behavioral, and family systems. Specific prevention and intervention topics such as conflict resolution are addressed. Readings emphasize the scientific study of violence through empirical research, including randomized controlled trials to evaluate programs. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 221 Adolescence (4)

An examination of physiological, social, and emotional factors affecting all stages of individual development during adolescence. Major theories and research on the subject are introduced. Among the topics addressed are biological changes, identity, autonomy, peer influences, substance abuse, and intimate relationships. Students are expected to present results from research studies they conduct on issues of adolescence. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 222 Adult Development and Aging (4)

An examination of physiological cognitive, social, and emotional factors affecting all stages of individual development during adulthood. Major theories of development and research on the subject are introduced. Among the topics addressed are physiological aging, cognitive functioning, work, intimate relationships, parenthood, retirement, loss, death, and bereavement. Students are expected to participate in field research projects and service-learning opportunities. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 223 Positive Psychology (4)

Psychology has traditionally been concerned with people's responses and reactions to difficulties, deficits, and disorders. Taking the opposing viewpoint, positive psychology is a course that aims to understand and implement behaviors and mental processes that foster optimal functioning and the pursuit of the good life. Both individual level and interpersonal level functioning are examined. Students in this primarily discussion-based course must be prepared to speak in class multiple times per class period. The course also involves a significant major project. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 224 Developmental Psychopathology (4)

This course examines how studies of normal development and abnormal development in children inform one another; how and why deviations from normal development occur; the bidirectional relationship between biological underpinnings and contexts (family, school) as they relate to development of psychopathology; and proximal and distal concerns for children that develop mental disorders. *Prerequisite: PSYC 202.*

PSYC 225 Cognitive Neuroscience (4)

An introductory course on the neural bases of higher cognitive processes including perception, action, attention, memory, language, socio-emotional functions, executive functions and consciousness. Also discussed are the mind-body problem and other current theories and conceptual approaches. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 226 Psychology of Creativity (4)

An examination of creativity in both the arts and sciences from the perspective of psychology. Topics include what makes something creative, the type of person who is most creative, the process of creativity, and aspects of the environment that foster creativity. Insights drawn primarily from developmental, personality, cognitive, and social psychology. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 227 Health Psychology (4)

This course examines psychological issues surrounding physical health and medical care. Theories from personality and social psychology are applied to topics such as stress-related diseases, exercise adherence, coping with illness, interpersonal relationships and health, doctor-patient interactions, dying, and the hospital environment. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 230 Child, Family, and Community Development in Rural Appalachia (4)

This interdisciplinary course addresses issues relevant to child, family, and community development in rural southern Appalachia, including (1) social and political history of the region; (2) social psychology and developmental neuroscience of stress and adaptation to stress (e.g., resilience); (3) structure and health of rural Appalachian communities; (4) community infrastructure (e.g., churches, businesses, and other local organizations); (5) design and implementation of intervention and prevention programs to foster neural, cognitive, and social development and mental health in children and families in rural communities. Sewanee faculty and visiting faculty from Yale University teach the course collaboratively. Not open for credit to students who have earned credit for PSYC 430.

PSYC 250 Anxiety Syndromes and Treatment Methods (2)

A review of the medical classification and causes of DSM-IV Anxiety syndromes. The course will introduce cognitive-behavioral procedures used to reduce anxiety in clinical populations. Students will learn to apply these procedures to personal nonclinical conditions and will compare theoretical applications vis. their experience. Students will present a literature review on a selected anxiety topic such as an assessment instrument. The class is only offered on a pass/fail basis and attendance at all classes is an essential requirement for a pass. *Prerequisite: PSYC 100 or PSYC 108 or junior standing.*

PSYC 251 Research Methods and Data Analysis (4)

An introduction to basic research approaches in psychology, including observational studies, correlational studies, true experiments, and quasi-experiments. Ethics, sampling, measurement, and data analysis are considered. Intended for psychology majors or for students planning to major in psychology. Weekly laboratory sessions focus on the process of scientific inquiry, giving students experience in the application of class principles. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 254 Introduction to Behavioral Neuroscience (4)

An introduction to the field of behavioral neuroscience. The course begins with an overview of the basics of brain anatomy, brain organization, and neuronal signaling. The remainder of the course focuses on specific topics that are commonly studied by neuroscientists. Such topics include the brain basis of memory, emotion, aging, and sleep. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 280 Psychology of Human Diversity (4)

A psychological investigation of human diversity, focused primarily on minority groups in the U.S. Among the psychological topics examined in a cultural context are those pertaining to gender, age, sexual orientation, ethnicity, disability, social class, personality, intelligence, health, intergroup relations, and intercultural interaction. Methods of cross-cultural research are also considered. Students are encouraged to develop a psychological appreciation of how diversity figures in various contexts, including research, service provision, work relationships, and personal life.

PSYC 349 Drugs and Behavior (4)

An examination of the effects of drugs on the brain and behavior. Content focuses on the mechanism by which legal and illicit drugs affect the brain and on how drug-induced brain changes alter behavior. In addition, major biological and psychological theories of addiction are examined. This class also explores how drugs are used and abused in different societies and cultures, the effects of this use and abuse on psychology and behavior, and how addiction is treated. *Prerequisite: PSYC 225 or PSYC 254.*

PSYC 355 Affective Neuroscience (Lab) (4)

This course covers the systems-level neural and behavioral bases of human and animal emotion. Students discuss readings paramount to understanding how we perceive motivationally significant information and stimuli and experience, express, and regulate our emotions. The course explores basic theories of emotion, automatic processes, emotion regulation, rewards, social relationships, decision-making, learning and memory, stress, and psychopathology (e.g., depression, anxiety, and personality disorders). Students design and conduct experiments using cognitive neuroscience methodology related to affective processing or emotion regulation, analyze the data, and write detailed laboratory reports. *Prerequisite: PSYC 251 and (PSYC 225 or PSYC 254).*

PSYC 356 Research in Social Psychology (Lab) (4)

An in-depth examination of the social circumstances which structure individuals' mental processing and behavior. Students will read original peer-reviewed research on social dynamics (e.g., dyads, groups, cultural norms) and be required to implement existing theoretical models, empirical findings, and methodological approaches in their discussions, assignments, and research projects. In the laboratory, students will independently design, propose, and conduct a scientifically rigorous psychological study (including advanced statistical data analysis using computer software) to answer a novel empirical question in social psychology. Not open for credit to students who have received credit for PSYC 203. *Prerequisite: PSYC 251.*

PSYC 357 Child Development (Lab) (4)

An examination of the physical, cognitive, social, and emotional development of infants and children, with a primary emphasis on theoretical issues and scientific methodology. Development is presented as a process of progressive interaction between the active, growing individual and his or her constantly changing and multifaceted environment. Organized chronologically with an approximately equal emphasis on the prenatal through middle childhood periods of development. Includes a laboratory that focuses on designing and conducting studies (including data analyses) to answer empirical questions on human development. Not open for credit to students who have received credit for PSYC 219. *Prerequisite: (PSYC 100 or PSYC 101) and PSYC 251.*

PSYC 358 Cognitive Psychology (Lab) (4)

An examination of aspects of cognition such as attention, perception, language, memory, problem-solving, reasoning, and decision-making. Consideration is given to theoretical and methodological issues, empirical approaches and evidence, and practical applications. Includes a laboratory that focuses on designing and conducting studies to answer empirical questions about cognition. Not open for credit to students who have received credit for PSYC 208. *Prerequisite: PSYC 251.*

PSYC 359 Advanced Behavioral Neuroscience (Lab) (4)

An examination of how brain function affects behavior. The course is an extension of PSYC 254 and includes an advanced examination of brain organization, neuronal signaling, and specific topics that are studied by neuroscientists. Such topics include the brain bases of fear, pain, eating, sexuality, and stress. This class also examines methods used to study behavioral neuroscience in humans and animals. The course includes a laboratory with a brain dissection and focus on designing and conducting studies to answer empirical questions about behavioral neuroscience. *Prerequisite: (PSYC 100 or PSYC 101) and PSYC 251 and PSYC 254.*

PSYC 363 Advanced Research Topics (2 or 4)

This seminar is devoted to the advanced study of a selected topic within psychology, with primary emphasis on the scientific process. Content focus varies by semester, at discretion of the instructor. Students review primary literature, design an original study, collect and analyze data, and compose a final report for public presentation. May be repeated once for credit with change of topic. *Prerequisite: PSYC 251.*

PSYC 402 Community Psychology (4)

A seminar focused on examining and applying the concepts, theory, principles, research methods, and goals of community psychology. This course aims to increase understanding of the interactions among individual, group, organizational, community, and societal factors as they affect psychological well-being, human development, and human relationships. It also examines research design, program implementation, and evaluation methods applicable to community psychology. *Prerequisite: Four courses in psychology.*

PSYC 403 Psychology and Popular Culture in the U.S. (4)

Did the World Wars "put psychology on the map" and convert Americans to the "therapeutic gospel"? How is the polygraph test related to Wonder Woman? Did humanistic psychology inspire Yuppies and feminists in the 1960s and can humanistic psychologists be "real men"? This seminar explores such questions, using primary and secondary sources that link the history of psychology and popular culture in the U.S. Students evaluate critically the current popularization of psychology and explore relationships between popular and academic psychology. *Prerequisite: Four courses in any combination from psychology and American studies.*

PSYC 406 Psychobiography (4)

A seminar on the psychological study of individual lives, with a focus on psychobiographical studies. Psychobiography draws on psychological theories and research to understand the work of an historically significant figure from the vantage point of the person's life history. The seminar introduces theories, methods, and standards used to conduct and evaluate psychobiographical research and interpretations. Readings include studies that trace meaningful connections between the lives and work of several well-known figures—artists, musicians, writers, scientists, and politicians—and students prepare a psychobiographical study on a person of their choice. *Prerequisite: Four courses in psychology.*

PSYC 408 Seminar in Abnormal Behavior (4)

A study of the major conceptual approaches that are adopted as clinicians assess, define, and conduct clinical interventions. Topics addressed include the nature of the client-therapist relationship, results from empirical investigation of therapeutic outcomes, ethical dilemmas faced in clinical practice and research, and problems peculiar to subspecialties such as forensic psychology and community psychology. *Prerequisite: PSYC 202 and three other courses in psychology.*

PSYC 410 Cognitive Illusions (4)

An examination of cognitive illusions, with a particular emphasis on what such illusions reveal about human thought processes in general. Includes illusions of perception, memory, reasoning, and metacognition considered from biological, information-processing, and evolutionary perspectives. The prevalence of cognitive illusions, their patterns of occurrence, and their implications for such real-world issues such as social interactions, choice of medical treatment, risk assessment, legal proceedings, political decisions, and financial judgments will be discussed. *Prerequisite: Four courses in psychology.*

PSYC 411 Judgment and Decision-Making (4)

This seminar examines selected topics and issues in human judgment and decision-making. Drawing largely from primary sources, the course considers various approaches to the study of decision-making, as well as descriptions and theories of human decision-making derived from those approaches. Students are led to reflect on the relevance and application of such issues to real-world choices in arenas such as economics, politics, business and marketing, health and medicine, and at individual, organizational, and broadly social levels. *Prerequisite: Four courses in psychology.*

PSYC 412 Psychology of Gender (4)

A comparison of different theoretical perspectives on sex and gender and a critical examination of research on gender differences and similarities in human behavior. Patterns of public attitudes regarding gender will also be discussed. *Prerequisite: Four courses in psychology and/or women's and gender studies.*

PSYC 413 The Self-Concept and Self-Esteem (4)

A seminar on the psychological examination and understanding of theories, principles, and applications of the self-concept and self-esteem. Students develop a rich and nuanced understanding of psychological concepts of selfhood (e.g., self-knowledge, the self in the relational context); they are also challenged to apply this understanding to their personal sense of self. Class material draw primarily from research in social psychology, but views from clinical, developmental, and cultural psychology are also included. *Prerequisite: PSYC 203 or PSYC 356 and three additional courses in psychology.*

PSYC 414 The Social Brain (4)

A seminar focusing on the interdisciplinary field of social neuroscience. Course content examines social and emotional behavior through a variety of levels and contexts, and identifies the neural systems that support these behaviors. The course explores a number of core social psychological domains (e.g., culture, motivation, emotion, person perception, empathy, decision making, interpersonal relationships, morality, and self-identity). *Prerequisite: PSYC 251 and (PSYC 225 or PSYC 254).*

PSYC 415 Relationships and Health (4)

A seminar on the ways in which close relationships and health are interconnected. The course examines the state of relationships and health literature and considers avenues for future research. It explores a number of psychological factors (e.g., social support, emotions, coping, health behaviors) to explain this robust association in the context of specific relationships (e.g., parent-child, friendship, romantic). *Prerequisite: PSYC 100 or PSYC 101, PSYC 251, and two PSYC courses.*

PSYC 416 Attachment Theory: Development, Well-being, and Risk for Psychopathology (4)

This course explores the rich theory and research within the field of attachment and explores how attachment has become increasingly relevant in understanding both well-being and risk for psychopathology at different ages. *Prerequisite: PSYC 100 or PSYC 101, PSYC 251, and two PSYC courses.*

PSYC 417 Seminar in Developmental Psychology: Human Development in Context (4)

This seminar provides readings and discussion of special topics in human development. The course draws on primary sources of classic and contemporary theory and research and focuses on examining human development in context. The role that family, workplace, schools, peers, community, and the larger culture have in human development is examined. *Prerequisite: four courses in psychology.*

PSYC 419 Addiction (4)

This seminar focuses on special topics related to addictive diseases. The course explores theoretical and empirical approaches to studying drug addiction, though behavioral addictions and compulsive disorders may also be considered. Readings include primary research related to the psychological, neurobiological, and sociocultural factors contributing to addiction. Current approaches to treatment are also discussed. *Prerequisite: PSYC 251 and two PSYC courses.*

PSYC 420 Consciousness and Unconsciousness (4)

An examination of current scientific study of consciousness and unconsciousness, including neural correlates of conscious and willful actions, manipulations of conscious will experience, the possible role of consciousness in evolution, and related topics. The course emphasizes how scientific results inform understanding of issues such as Chalmers hard problem of consciousness, the tenability of competing models of consciousness, the perceived unity of self, and perceptual experience of free will. *Prerequisite: Four courses in psychology.*

PSYC 421 Sex, Brain, and Behavior (4)

This seminar explores special topics related to reproductive behavior. Topics may include sexual differentiation, partner preference, mate selection, sexual behavior, and parental care in human and non-human animals. Readings include primary journal articles and text excerpts reflecting psychological, neurobiological, and sociocultural perspectives. *Prerequisite: PSYC 251 and two PSYC courses.*

PSYC 444 Independent Study (2 or 4)

The student will design and execute an experimental research project terminating in a written report or will complete readings in an area of psychology. May be repeated. *Prerequisite: Professor consent and prerequisite override required.*

PSYC 480 Language, Literacy, and Play (4)

The complicated role of play in the development of language and literacy skills among preschool-aged children. Topics include social-emotional, cross-cultural, cognitive, and communicative aspects of play. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 481 Introduction to Cognitive Science (4)

An introduction to the interdisciplinary study of how the mind works. Discussion of tools, theories, and assumptions from psychology, computer science, neuroscience, linguistics, and philosophy. No single individual may receive credit for both this course and either cognitive course at Sewanee (PSYC 208 and PSYC 358). Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 482 Emotional Intelligence (4)

The ability to integrate emotional information with cognitive processes is essential for management of personal and social life. The emotion-related skills comprising emotional intelligence (the perception, use, understanding, and management of emotion) defined, measured, and developed. How these skills relate to effective social functioning, mental health, and quality of life at home, school, and work. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 483 Cognitive Neuroscience (4)

An overview of cognitive neuroscience at an introductory graduate level. Covers principles, methods, and key research findings in multiple topic domains (e.g., language, memory, vision, attention, working memory/executive control, movement control, emotion and reward, social processes). The course emphasizes behavioral and neural processes, with some discussion of computational approaches. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 208 or PSYC 254 or PSYC 358.*

PSYC 484 Autism and Related Disorders (4)

Topics in the etiology, diagnosis, treatment, and natural history of childhood autism and other severe disorders of early onset. Retardation, behavioral disorders, and childhood psychosis. Supervised experience. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 100 or PSYC 101.*

PSYC 485 Cellular and Molecular Mechanisms of Neurological Disease (4)

The course focuses on those diseases (Alzheimer's, Parkinson's, ALS, and other neurodegenerative diseases, triplet repeat induced diseases, multiple sclerosis, epilepsy, etc.) in which modern neuroscience has advanced mechanistic explanations for clinical conditions. It highlights recent molecular, electrophysiological, and imaging experiments in parsing disease mechanisms. The application of pathophysiological understanding to therapeutics is considered. This course is taught at Yale and is available only through the Sewanee-At-Yale Directed Research Program. *Prerequisite: Approval of the Sewanee-at-Yale program director.*

PSYC 490 Principles of Neuroscience (4)

General neuroscience seminar: Lectures, readings and discussion of selected topics in neuroscience. Emphasis will be on how approaches at the molecular, cellular, physiological and organismal levels can lead to understanding of neuronal and brain function. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 254.*

PSYC 491 Neurobiology of Emotion (4)

A study of the brain circuitries involved in emotion and emotional learning and memory. Consideration of emotion research in a historical context; discussion of progress that has been made in understanding the neurobiology of emotion in both laboratory animals and humans. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 254.*

PSYC 492 History of Modern Neuroscience (4)

Survey of classical papers that have been the foundation for the rise of modern neuroscience since the 1950s. Areas covered range from genes and proteins through cells and systems to behavior. Classes combine overviews of different areas with discussions of selected classical papers. Emphasis is on how convergence of techniques, concepts, and personalities has been the basis for major advances. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 254.*

PSYC 493 Research Topics in Emotion and Cognitive Control (4)

This course covers (1) research in emotion and cognitive control, and (2) science communication skills. For research, the emphasis is on the design, conduct, and analysis of behavioral and fMRI studies, emphasizing individual differences. Once a month, we have a session on science communication skills, with topics chosen by students to meet their interests and needs (spoken research presentations, persuasive communication, graph design, Web design, and so on). Students may enroll in the course and attend only the science communication skills component. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. *Prerequisite: PSYC 208 or PSYC 254 or PSYC 358.*

PSYC 498 Research Methods Seminar (4)

This seminar is organized around presentations of individual research projects, emphasizing detailed critique of project designs, findings, and conclusions. Students also review reports of empirical research written by other students in the seminar to develop their skills in both writing and critiquing research reports. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. With the approval of program director and the biology department, this course may be listed as BIOL 498. *Prerequisite: An introductory psychology or introductory biology course and approval of the Sewanee-at-Yale program director.*

PSYC 499 Directed Research (4 or 8)

Students conduct research under the direction of a faculty member on a topic of mutual interest. Typically culminates in a written research report. Admission to the Sewanee-At-Yale Directed Research Program required. This course is only available through the Yale Directed Research Program. With the approval of program director and the biology department, this course may be listed as BIOL 499. *Prerequisite: An introductory psychology or introductory biology course and approval of the Sewanee-at-Yale program director.*