PSYCHOLOGY

Chair, Professor Martha Arterberry
Professors Martha Arterberry and Edward Yeterian; Associate Professors Jennifer Coane, Melissa Glenn, Tarja Raag, and Christopher Soto; Assistant Professors Travis Carter, Allecia Reid McCarthy, and Erin Sheets; Visiting Assistant Professors Joseph Atkins and Angela Bell

We believe the best way to learn the science of psychology is by engaging our faculty and students in a collaborative search for new knowledge about human cognition, emotion, and behavior. This process begins with an understanding of the discipline’s conceptual foundations, and it requires a firm grounding in methods of research design and statistical analysis. Psychology majors learn how to explain behavior from multiple perspectives; how to ask substantive questions and to use appropriate empirical methodologies to address those questions; how to communicate their findings clearly in written, oral, and visual forms; and how to interact with humans and animals following the ethical standards of the field.

An extensive program of laboratory research provides the means for students and faculty to work together to explore interesting phenomena in cognition, development, emotion, health, motivation, neuroscience, perception, personality, psychopathology, and social psychology. Civic engagement and internship opportunities allow students to apply course content to real-world contexts.

The concentration in neuroscience allows students to explore an interdisciplinary field combining the study of psychology and biology. More information on research in the various laboratories may be found on the department’s website, colby.edu/psychology.

Students who major in psychology will graduate knowing how to ask good questions and how to find and communicate the answers to those questions. These skills are useful in any field of endeavor, especially for graduate study in psychology or other professional programs such as law or medicine and as general preparation for entry into business, educational, nonprofit, or governmental work settings.

Because Psychology 214 and 215 impart skills that are crucial for the required advanced work in collaborative research, students must maintain minimum grades of C in these courses in order to continue in the major. Psychology 214 and 215 should be taken in the sophomore year and no later than the junior year; these courses may not be repeated. Two courses (equivalent to Psychology 111 or the 200-level electives) transferred from other institutions, including those taken while abroad, may be counted toward the major. Psychology and psychology: neuroscience majors may not take any psychology course satisfactory/unsatisfactory. Psychology courses used to fulfill a major in educational studies: human development cannot also count toward a psychology or psychology: neuroscience major.

Requirements for the Major in Psychology
Psychology 111, 214, 215, 420; at least two courses from 241, 251, 253, 254, 259; at least two courses from 232, 233, 234, 236, 275; at least one seminar with an associated course in collaborative research; at least one other 300-level course. One year of laboratory experience in the natural sciences is recommended for all majors.

Requirements for the Major in Psychology: Neuroscience
Psychology 111, 214, 215, 233, 374 or 375, 420; at least two courses from 232, 234, 236, 254, 275; at least two courses from 241, 251, 253, 259; at least one seminar with an associated course in collaborative research. In addition, Biology 163, 164, and 274 (with lab); at least one biology course from 225, 276, 279, 332, 373, 374, 375, 474. A student may not double major in biology with a concentration in neuroscience and psychology: neuroscience.

Honors in Psychology or Psychology: Neuroscience
Near the end of the junior year students may be invited by the department to participate in the honors program. Criteria for invitation normally include major GPA, completing at least one seminar and collaborative research paired course by the end of the junior year, overall engagement in research, and compatibility of student and faculty interests. In addition to fulfilling the basic requirements for the psychology major, students must complete the honors research sequence (Psychology 483, 484). Upon vote of the department, the student will be awarded his or her degree with “Honors in Psychology.”

Course Offerings

PS111fs Introduction to Psychology An examination of classical and contemporary topics in psychology, including neuroscience, learning, memory, cognition, language, intelligence, development, personality, psychopathology, and social psychology. Students will begin developing skills that will enhance understanding of the discipline of psychology, including explaining behavior from multiple theoretical perspectives, conducting research and evaluating the results, applying research to real-world contexts, thinking about implications of research, and working collaboratively in a scientific context. Four credit hours. S. BELL, COANE, GLENN, RAAG, SOTO

[PS115] Psychology of Drugs Drugs are an integral, but often controversial aspect of life in the United States and elsewhere. It was not
until the 19th century that the formal study of drugs by scientists, including psychologists, gained significant momentum. The number of drugs available has increased at the same time as our scientific understanding and drug laws have proliferated. Students write about behavioral and neural aspects of drugs in different formats, e.g., response papers, media-style articles, and research reviews, and give presentations. Credit cannot be earned for both Psychology 115 and 236. 

**[PS241] Health Psychology** An examination of the contributions of psychology to identifying factors that relate to health and illness,
promoting and maintaining health, and preventing and treating illness. Students will gain knowledge of methodologies for studying health behavior, the role of psychological, social, and structural factors in health and illness, theories of health behavior, and designing interventions to promote health and manage illness. In addition, students will apply course content to real-life contexts. **Prerequisite:** Psychology 111. **Four credit hours.**

**PS251s  Personality Psychology**  An individual's personality is that person's characteristic pattern of thinking, feeling, and behaving, together with the psychological mechanisms that underlie this pattern. In this introduction to personality science, students will critically engage with a variety of theories, methodologies, and research findings that influence current thinking about personality. Issues considered include approaches to studying personality; biological, social, and cultural bases of personality; conscious and unconscious personality processes; and influences of personality on behavior and life outcomes. **Prerequisite:** Psychology 111. **Four credit hours.**

**PS253s  Social Psychology**  An examination of major topics and current issues and research in social psychology. Includes self-perception and cognitive dissonance, social cognition, attitudes and persuasion, interpersonal attraction, social influence, the social self, group processes, judgment and decision making, and various special applied topics such as happiness, and morality. **Prerequisite:** Psychology 111. **Four credit hours.**

**PS254f  Abnormal Psychology**  An examination of major paradigms, research, and current issues in abnormal psychology. Includes diagnostic classification, etiology, and clinical intervention strategies as applied to the major categories of mental disorder. Special topics such as treatment outcome research methods, professional ethics in mental health settings, and the importance of comorbidity in the study of psychopathology are addressed. **Prerequisite:** Psychology 111. **Four credit hours.**

**PS259f  Lifespan Development**  A study of human development across the lifespan with emphasis on the general characteristics of development from birth to death. Various theories will be explored to explain developmental processes. Topics include perceptual, cognitive, social, and identity development; the role of families, communities, and culture in development; and death and dying. Students have the option to participate in civic engagement activities in the local community. This applied work helps students explore how to apply the findings of research or tenets of theory to real-world contexts. Students with prior credit for Psychology 255 or 256 cannot receive credit for 259. **Prerequisite:** Psychology 111. **Four credit hours.**

**PS275f  Human Neuropsychology**  An examination of neural bases of normal and abnormal human cognition, emotion, and behavior, with integration of modern and classic data from experimental and clinical neuropsychology and neurology. Emphasis on functional neuroanatomy in sensory-perceptual, motor, and emotional-motivational function; in cognitive processes including learning, memory, and language; in mental disorders; and in brain injury and disease. Includes critical reading and discussion of modern and classic scientific and popular articles and related written assignments and oral presentation. **Prerequisite:** Psychology 111. **Four credit hours.**

**[PS336]  Seminar in Experimental Social Psychology**  Critical examination of various areas of research in social psychology, with an emphasis on current issues. Discussion topics may include self-regulation and goals, implicit identity, self-deception and motivated reasoning, embodied cognition, political beliefs and behavior, moral reasoning, social cognition, and consumer behavior. **Prerequisite:** Psychology 251 and 253, and concurrent enrollment in 337. **Four credit hours.**

**[PS337]  Collaborative Research in Social Psychology**  Laboratory involving collaborative empirical research projects on topics discussed in Psychology 336. **Prerequisite:** Concurrent enrollment in Psychology 336. **One credit hour.**

**PS339f  Seminar in Personality Psychology**  With its companion, Psychology 340, trains students to be personality psychologists— informed consumers and producers of personality science. Students will critically engage with a variety of personality theories and research through reading, writing, and discussion. Issues considered include how specific habits of thinking, feeling, and behaving cohere into broader personality traits; how personality develops across the life span; and how personality influences behavior and life outcomes. **Prerequisite:** Psychology 215 and 251, and concurrent enrollment in Psychology 340. **Four credit hours.**

**PS340f  Collaborative Research in Personality Psychology**  Each student will become an expert about a specific issue related to personality. Working collaboratively, students will then design, conduct, and present a research project that contributes new scientific knowledge about this issue. **Prerequisite:** Psychology 215 and 251, and concurrent enrollment in Psychology 339. **One credit hour.**

**[PS341]  Seminar in Memory**  Focuses on the processes by which memories are modified or distorted. Students will acquire a basic understanding of how memories are reconstructive in nature and depend on and interact with other cognitive processes. Evaluation of theories and interpretation of data will be achieved through reading and discussing original sources. In-class discussion, as well as presentations and written assignments, will help students develop critical and analytical skills to understand and interpret data. **Prerequisite:** Psychology 215 and 232, a W1 course, and concurrent enrollment in Psychology 342. **Four credit hours.**
[PS342] Collaborative Research in Memory  Collaborative empirical research projects on topics discussed in Psychology 341. Students will conduct original empirical work testing the reconstructive nature of memory. Students' competence in research and communication will be assessed, following the guidelines of the American Psychological Association, through written assignments and oral presentations, both collaborative and individual. Prerequisite: Concurrent enrollment in Psychology 341. One credit hour.

PS343s Seminar in Emotion Theory and Research  Critical examination of various areas of research in emotion, with an emphasis on current issues. Discussion topics may include models of emotion, emotion antecedents and appraisal, emotional response (facial expression, subjective report, physiological arousal), emotion regulation, and dysfunctional emotion in the context of psychopathology. Prerequisite: Psychology 215 and either 253 or 254, and concurrent enrollment in Psychology 344. Four credit hours. SHEETS

PS344s Collaborative Research in Emotion  Laboratory involving collaborative empirical research projects on topics discussed in Psychology 343. Students design, conduct, and present original research on emotion. Prerequisite: Concurrent enrollment in Psychology 343. One credit hour. SHEETS

PS347f Seminar in Cognitive Development  Study of children's cognition with a goal of understanding their increasing competency in eyewitness testimony. Focusing on 3- to 5-year-old children, current theories and empirical research are explored. Discussion topics may include memory development, information processing, perception, attention, and/or how the social context influences cognition. Reading and discussion of empirical research articles allow for development of skills for evaluating current empirical research, placing new data within a theoretical context, and explaining cognitive development from several theoretical perspectives. Prerequisite: Psychology 215; one of 232, 255, or 259; and concurrent enrollment in 348. Four credit hours. W3. ARTERBERRY

PS348f Collaborative Research in Cognitive Development  Collaborative empirical research projects on topics discussed in Psychology 347. Empirical work addressing an original research question on a topic pertaining to 3- to 5-year-old children's cognitive development. Collaborative and individual oral and written assignments, following the conventions of the American Psychological Association, evaluate students' research and communication competencies. Includes volunteering weekly in a local early-childhood program. Prerequisite: Concurrent enrollment in Psychology 347. One credit hour. ARTERBERRY

PS349f Seminar in Neural Plasticity and Behavior  Several topics within the field of behavioral neuroscience will be examined in depth with an emphasis on rat models of cognition, emotion, and motivated behaviors. Current and historical contexts will be examined and discussion topics will focus on varieties of neural plasticity and their relevance to behavior, including adult hippocampal neurogenesis, neuron morphology, neurotransmitter function, protein expression and how these plastic features pertain to memory consolidation, anxious and exploratory behaviors, stress reactivity and consequences, reward mechanisms, and/or social interactions. Reading and discussion of empirical and review papers will develop skills to critically evaluate and integrate published and generated data. Prerequisite: Psychology 215 and 233, and concurrent enrollment in Psychology 350. Four credit hours. W3. GLENN

PS350f Collaborative Research in Neural Plasticity  Collaborative empirical research projects on topics discussed in Psychology 349. Empirical work addressing an original research question on a topic pertaining to a feature of brain plasticity and a corresponding behavioral construct will be conducted. Collaborative and individual oral and written assignments, following the conventions of the American Psychological Association, will be used to evaluate students' research and communication competencies. Prerequisite: Concurrent enrollment in Psychology 349. One credit hour. GLENN

PS352Af Sex and Gender Seminar  Psychological principles as they relate to sex/gender/sexuality. Focus topics including theoretical perspectives of how the dimensions of sex/gender/sexuality are formed will be addressed in the first half; specific topics related to sex/gender/sexuality in the second. Focus topics are selected by students and have included dating violence, gender bullying, homophobic/transphobic bullying, domestic violence, and links between systems of discrimination (sexism/racism/homophobia/classism). Students are expected to participate in applied work or activism and to reflect on how to bridge the gap between research/theory in the real world to solve social problems linked to sex/gender/sexuality. Prerequisite: Psychology 255, 256 or 259, and senior status. Four credit hours. RAAG

[PS352C] Seminar on Mood Disorders and Creativity: The Mad-Genius Debate  Are creative people more likely to experience mood disorders? Can extreme mood experiences inform and even enhance creativity? The concept of the "mad genius" has been debated for centuries and remains controversial within modern psychological science. We will explore the nature of creativity and its intersection with mood and mental illness. Learning goals include discussing and critically examining conflicting claims about the effects of mood episodes on creative productivity, conceptually linking psychological science to disciplines of creative expression, and proposing a novel research project regarding mood disorders and creativity. Prerequisite: Psychology 254. Four credit hours.

PS352D Seminar: Psychology of Prejudice  Despite increasing efforts to eradicate prejudice in our society, we have yet to achieve equality in the treatment and opportunities for many social groups across race, gender, sexual identity, socioeconomic status, and other
features. From a social psychological perspective, we will examine the causes and consequences of stereotyping, prejudice, and discrimination in their many forms. Both individual and group-level processes impact judgments, performance, and attributing blame to people who hold prejudiced beliefs or people who are targets of prejudice. We will study empirical research and theory to better understand the ways in which stereotypes can be automatic, maintained, and reduced. Prerequisite: Psychology 253. Three credit hours.

PS354s Seminar in Emerging Adulthood Study of identity change in emerging adults. Current theories and empirical research on identity are explored with an emphasis on developmental processes. Discussion topics may include contexts of change, contextual triggers of change, scaffolding for healthy identity change, and the intersection among identities. Students will determine the more specific focus of identities we study: religious, political, sexual, gender, ethnic/racial, etc. Reading and discussion of empirical research articles allow for development of skills for evaluating current research, placing new data within a theoretical context, and explaining identity development from several theoretical perspectives. Prerequisite: Psychology 215, and either 255, 256, or 259, and concurrent enrollment in 355. Four credit hours.

PS355s Collaborative Research in Emerging Adulthood Collaborative empirical research projects on topics discussed in Psychology 354. Empirical work addressing an original research question on a topic pertaining to emerging adult identity. Collaborative and individual oral and written assignments, following the conventions of the American Psychological Association, in addition to evaluating student research and communication competencies. Prerequisite: Concurrent enrollment in Psychology 354. One credit hour.

[PS356] Seminar in Social Psychology and Health Critical examination of current issues in health psychology, with an emphasis on the social psychological approach to the study of health. Discussion topics may include whether, how, and for which individuals social relationships and the social environment affect health, theories of health behavior, and social psychological approaches to health behavior change. Reading and discussing empirical research articles will aid students in developing the skills to both critically evaluate and effectively communicate about current research. Prerequisite: Psychology 215, either 241 or 253, and concurrent enrollment in 357. Four credit hours.

[PS357] Collaborative Research in Social Psychology and Health Collaborative empirical research projects on topics discussed in the seminar. Students will design, conduct, and present the findings of a research project that contributes new knowledge to the field of health psychology. Prerequisite: Psychology 215, and either 241 or 253, and concurrent enrollment in 356. One credit hour.

PS374s Seminar: Psychology and Neuroscience Exploration of the vast intersection between the fields of psychology and neuroscience: how psychology has shaped and contributed to the field of neuroscience, and how findings from neuroscience aid psychological research and theories. Topics may include developmental and degenerative neuropahtology and the impact of environment, genetics, psychological factors, and sociocultural contexts over them. Students will read, critically evaluate, and discuss empirical and theoretical papers as they gain depth of knowledge on different topics. Students will present their ideas in oral and written form and will work on a collaborative writing project. Prerequisite: Psychology 233. Four credit hours.

PS375s Seminar: Human Neuropsychology Exploration of current and classic issues in human brain-behavior relationships, normal and abnormal, through critical reading and discussion of scientific literature in experimental and clinical neuropsychology and neuroscience, behavioral neurology, and neuropsychiatry. Topics may include neural bases of sensory-perceptual, cognitive, emotional-motivational, and motor processes; mental and neurological disorders; brain injury and disease; and drugs and medications. Includes oral presentations and written critical research reviews. Prerequisite: Psychology 215, either 241 or 253, and concurrent enrollment in 357. Four credit hours.

PS416s Senior Empirical Research A senior independent empirical project conducted in one semester that addresses a question about human or animal behavior or mental processes. Students will be expected to carry out all phases of a research investigation, including a literature review, study design, data collection and analyses, and writing a final report. Prerequisite: Psychology 233, 236, or 275. Four credit hours.

PS420s Senior Integrative Seminar A culminating experience for students majoring in psychology, organized around the department's research colloquio series. Students will critically engage with a variety of current psychological research and will integrate theories, methodologies, and findings across areas of psychology. Specifically, students will attend research presentations by invited guest speakers, read companion papers selected by the speakers, meet in a seminar session to discuss each speaker's presentation, and write a final paper that integrates the theories, methodologies, or research findings of at least two colloquium speakers. Prerequisite: Senior standing in psychology and permission of the instructor. Three credit hours.

PS483f Honors Research I Under faculty supervision, students prepare a proposal and carry out an independent, empirical project culminating in the preparation of a paper of publishable quality and a formal presentation. A 3.50 major average at the end of the senior year is a condition of successful completion of this program. Application required during junior year. Prerequisite: A 3.50 major average at the end of the junior year and permission of the department. Four credit hours.
Honors Research I  Noncredit.

PS491f, 492s  Independent Study  Individual projects, under faculty supervision, in areas in which the student has demonstrated the interest and competence necessary for independent work. Cannot be counted toward the psychology major or minor. Prerequisite: Permission of the instructor.  One to four credit hours.  FACULTY