# **PSYCHOLOGY**

The Psychology department offers students a major program that allows choices of courses from among a wide variety of fields in psychology: behavioral neuroscience, clinical and counseling, cognitive, computational neuroscience, cultural, developmental, health, and social. In addition to the considerable breadth offered, the program encourages students to focus on more specialized areas, through advanced coursework, seminars, labs, and supervised research. Bryn Mawr Psychology majors find that the major program provides a strong foundation for graduate study in all areas of psychology, as well as for graduate work in medicine, social work, law, business, public health, education, and other fields. Students majoring in psychology also can pair their major with a minor in Asian American Studies, Child and Family Studies, Data Science, Health Studies, or Neuroscience (among other minors offered at BMC). A student who wishes to become a Psychology major should fill in a Major Plan and get declared with their class year's assigned major advisor prior to preregistration in the spring semester of their sophomore year.

## **Major Requirements**

Code	Title	Units
PSYC B105	Introductory Psychology (or a one-semester introductory psychology course taken elsewhere)	1
PSYC B205	Research Methods and Statistics	1
Two half-credit 200-level laboratory courses (courses designated as PSYC 28X)		s 1
Six courses at the 200 and 300 level (at least two 200-level and two 300-level)		
One Senior Capstone Requirement		
Total Units		3

Majors may fulfill their Senior Capstone Requirement with PSYC B399 or by completing two semesters of senior thesis research (PSYC B400).

Major Writing Requirement: Majors should complete the writing requirement prior to the start of the senior year. The writing requirement can be met by completing two half-credit 200-level writing intensive laboratory courses (courses designated as PSYC 28X).

Majors may substitute advance placement credit (score of 5 on the AP psychology exam), international baccalaureate credit (score of 6 or 7 on the IB psychology exam), or completing Introductory Psychology at an accredited college (achieving a merit grade, contact department chair for syllabi review) for PSYC B105. In general, courses at the 200 level survey major content areas of psychological research. All 200-level subject courses and PSYC B205 require a merit grade in PSYC B105 or the permission of the instructor. Half-credit 200-level laboratory courses (courses designated as PSYC 28X) require a merit grade in PSYC B205. Courses at the 300 level require a merit grade in PSYC B205 and typically a merit grade in a 200-level survey course as prerequisites and offer either specialization within a content area or integration across areas. PSYC B398 and PSYC B400 are senior capstone courses and integrative culminating experience in psychology.

Majors are also required to attend one semester of a one-hour, weekly Psychology Colloquium series as soon as possible after they declare the major and prior to the conclusion of their junior year. Psychology Colloquium is offered every semester. This requirement is designed

to introduce students to faculty members' areas of research, provide additional opportunities for student-faculty interactions, build a sense of community, and provide opportunities for professional and self-development.

## **Advising**

The selection of courses to meet the major requirements is made in consultation with the student's major adviser. Any continuing faculty member can serve as a major adviser and faculty in the department are assigned to different class years for advising. It is expected that the student will sample broadly among the diverse fields represented in the curriculum. Students should contact their major adviser about major credit for a course outside the department before taking the course.

### **Honors**

Departmental honors (called Honors in Research in Psychology) are awarded on the merits of a report of research in the senior thesis (the design and execution; and the scholarship exhibited in the writing of a paper based on the research). To be considered for honors, students must have a grade point average in psychology of 3.7 or higher at the end of the fall semester of the senior year.

# Haverford College Courses That Count Toward the Major

Psychology courses offered at Haverford College may be substituted for the equivalent Bryn Mawr courses for purposes of the Bryn Mawr psychology major (the same is true for psychology courses offered at Swarthmore and the University of Pennsylvania). Specifically, PSYC 100 at Haverford may be substituted for PSYC 105. PSYC 200 at Haverford may be substituted for PSYC 205. One exception to note is the half-unit 300-level laboratory courses at Haverford do not count towards the Bryn Mawr college-wide writing requirement in the major. For all other courses, a student should consult with the major adviser.

## **Minor Requirements**

A student may minor in Psychology by taking PSYC B105 Introductory Psychology and PSYC B205 Research Methods and Statistics and any other four courses that meet the requirements of the major. Psychology minors are welcome to participate in Psychology Colloquium, but are not required to participate to complete the minor.

## **Minor in Asian American Studies**

Students majoring in psychology can minor in Asian American Studies. The minor comprises six courses that fulfill three requirements: at least 3 "Core Courses" in Asian American Studies (including Asian American Psychology), at least 1 course in Comparative Race and Ethnic Studies course, and 1 course in Transnational or Global Connections with Asia. Additional information for the minor is listed on the Asian American Studies website.

# **Minor in Child and Family Studies**

Students majoring in psychology can minor in Child and Family Studies. The minor comprises six courses: one gateway course (PSYC B206, PSYC B203, EDUC B200, or SOCL B201), plus five additional courses, at least two of which must be outside of the major department and at least one of which must be at the 300 level. Additional information for the minor is listed on the Child and Family Studies's website.

### **Minor in Data Science**

Students majoring in psychology can minor in Data Science. The minor consists of one course in Data Analytic Approaches (such as PSYC B205), one course in Computing and Data Structures (DSCI B100, CMSC B110, or BIOL B115), plus four additional courses. Additional information for the minor is listed on the Data Science website.

### **Minor in Health Studies**

Students majoring in Psychology can minor in Health Studies. The Bi-College Health Studies Multidisciplinary Minor, a collaboration between Haverford and Bryn Mawr Colleges, brings together students and faculty to explore the intertwined areas of health, disease, and social justice. We offer unparalleled training for students interested in confronting complex real-world health problems. Multidisciplinary in approach and collaborative in spirit, our curriculum embraces the social sciences, natural sciences, and humanities. Students learn how to think about health from a variety of disciplinary perspectives and with an appreciation of its many dimensions. Additional information is offered on the Bi-College Health Studies Multidisciplinary Minor website.

# **Minor in Neuroscience**

Students majoring in psychology can minor in Neuroscience. The minor comprises six courses: one gateway course (NEUR H100, PSYC B218 or PSYC H217, or BIOL B202), plus five additional courses. The five additional courses have these constraints:

- Three of the five credits must come from the list of approved upperlevel neuroscience courses,
- 2. Two of the five credits must come from the list of approved allied
- 3. At least one of the credits must be at the 300-level or higher,
- 4. One of the five credits may come from supervised senior research in neuroscience
- No more than two of the six minor credits may come from institutions outside of the Bi-Co,
- No more than two of the six minor credits may be double-counted towards a major.

Additional information for the minor is listed on the Neuroscience Website

#### PSYC B105 Introductory Psychology (1 Unit)

How do biological predispositions, life experiences, culture, and other social forces contribute to individual differences in human and animal behavior? This biopsychosocial theme will be examined in domains such as perception, cognition, learning, motivation, emotion, and social interaction thereby providing an overview of psychology's many areas of inquiry. The laboratory component of the course provides students opportunities to engage in data collection, research design, data analysis, and scientific writing in the psychological sciences. Students sign up for a laboratory component during the first week of class (laboratory times are typically held for 2 hours per week; (four weekday evening times and one weekend time.

#### PSYC B203 Educational Psychology (1 Unit)

Topics in the psychology of human cognitive, social, and affective behavior are examined and related to educational practice. Issues covered include learning theories, memory, attention, thinking, motivation, social/emotional issues in adolescence, and assessment/learning disabilities. This course provides a Praxis Level II opportunity. Classroom observation is required. Prerequisite: PSYC B105 (Introductory Psychology)

#### PSYC B205 Research Methods and Statistics (1 Unit)

An introduction to research design, general research methodology, and the analysis and interpretation of data. Emphasis will be placed on issues involved with conducting psychological research. Topics include descriptive and inferential statistics, research design and validity, analysis of variance, and correlation and regression. Each statistical method will also be executed using computers. Lecture three hours, laboratory 90 minutes a week.

#### PSYC B208 Social Psychology (1 Unit)

This course is designed to expose students to the key theories in social psychology and help develop critical thinking skills to ask questions like a social psychologist (e.g., How do we explain behavior? Why do people behave differently toward outgroup vs. ingroup members?). The course will cover social psychology's history and its philosophical perspectives, including classic theories, methodologies, and research of social psychology. Special attention will be given to how these classic theories can be applied to current events, media, and everyday situations. Topics include attribution, emotion, attitudes and rationalization, stereotyping and prejudice, and social influence. Prerequisite: PSYC B105 or H100 (Introductory Psychology), or instructor's permission.

#### PSYC B209 Clinical Psychology (1 Unit)

This course examines the experience, origins and consequences of psychological difficulties and problems. Among the questions we will explore are: What do we mean by abnormal behavior or psychopathology? What are the strengths and limitations of the ways in which psychopathology is assessed and classified? What are the major forms of psychopathology? How do psychologists study and treat psychopathology? How is psychopathology experienced by individuals? What causes psychological difficulties and what are their consequences? How do we integrate social, biological and psychological perspectives on the causes of psychopathology? Do psychological treatments (therapies) work? How do we study the effectiveness of psychology treatments? Prerequisite: Introductory Psychology (PSYC B105 or H100). Please note that this course was previously known as "Abnormal Psychology" and has now been renamed "Clinical Psychology" and can not be repeated for credit

#### PSYC B211 Lifespan Development (1 Unit)

A topical survey of psychological development across the lifespan, focusing on the interaction of personal and environmental factors in the ontogeny of perception, language, cognition, and social interactions within the family and with peers. Topics include developmental theories; infant perception; attachment; language development; theory of mind; memory development; peer relations and the family as contexts of development; identity and the adolescent transition; adult personality; cognition in late adulthood; and dying with dignity. Prerequisite: PSYC B105 or PSYC H100. Interested students can take this course or PSYC B206, but not both

#### PSYC B212 Human Cognition (1 Unit)

This course provides an overview of the field of Cognitive Psychology, the branch of psychology that studies how we think. Over the semester we will survey classic and contemporary theory and findings on a wide range of mental processes that we use every day – from attention and memory to language and problem solving – and our goal will be to understand how the human mind works! Prerequisite: PSYC B105 or H100 (Introductory Psychology), or instructor's permission.

# PSYC B215 Thorne School Practicum: Bridging Research and Practice (1 Unit)

This is a 1-credit Praxis II course that requires 3 hours of weekly fieldwork in any of the five Phebe Anna Thorne School programs (Nearly 3s, Younger and Older Preschool classes, Language Enrichment Preschool Program, Kindergarten). In addition to their fieldwork, students will meet as a group once each week with the course instructor. This praxis course is distinguished by dynamic interaction between hands-on fieldwork and collaborative in-class academic learning. Students will integrate their fieldwork experiences with literature on child development and early childhood education, including scholarly evidence that underpins the Thorne School's commitment to play-based, social-emotional learning. The course also provides an opportunity for students to learn from each other and deepen their understanding of development in early childhood, as they will share their diverse experiences from the five different Thorne School programs serving children from ages 2 to 6.

#### PSYC B218 Behavioral Neuroscience (1 Unit)

This course will introduce students to the field of behavioral neuroscience. The first part of the course will familiarize students with the brain and neuronal communication. Then, we will delve into brain-behavior relationships. Topics covered will include: sex behavior, hunger, sleep, emotion, and psychopathology. Classic and state-of-theart neuroscience research methodologies leading to this knowledge will be highlighted. Students will learn course content through lectures, readings, and digital media. To culminate the course, students will write a literature review on a topic of their choosing within the field of behavioral neuroscience. Lecture three hours a week. Prerequisite: Introductory Psychology (PSYC B101 or PSYC H100) or NEUR H100

#### PSYC B224 Cultural Psychology (1 Unit)

Explores human behavior as a product of cultural context. Why are some aspects of human behavior the same across cultures, while others differ? Topics include the relationships between culture and development, cognition, the self, and social behaviors. Discussions include implications of cross-cultural psychology for psychological theory and applications. Prerequisites: ANTH101, PSYCB105, PSYCH100, SOCL102 or permission of instructor

#### PSYC B231 Health Psychology (1 Unit)

This course will provide an overview of the field of health psychology using lecture, exams, videos, assignments, and an article critique. We will examine the current definition of health psychology, as well as the theories and research behind many areas in health psychology (both historical and contemporary). The course will focus on specific health and social psychological theories, empirical research, and applying the theory and research to real world situations. Prerequisite: Introductory Psychology (PSYC B105) or Foundations of Psychology (PSYC H100). Students may take either this course or HLTH/PSYC H245 not both.

#### PSYC B265 Computational Neuroscience (1 Unit)

This course introduces students to the field of computational neuroscience. Computational neuroscience uses mathematical models to understand the information carried in the brain at many scales: a single neuron, synaptic connections between neurons, and populations of neurons. Mathematical models help us gain a precise understanding of the dynamics of our nervous system and make better predictions by running simulations of the system. In this course, students will learn key concepts and topics in computational neuroscience. Topics include neural encoding and decoding, artificial neural networks, reinforcement learning, and Bayesian probability theories. They will gain hands-on experience formulating the mental processes in the brain in terms of mathematical equations and writing computer codes in programming languages such as Python and MATLAB to simulate these processes. Prerequisites: Introductory Psychology (PSYC B101 or PSYC H100), or Introduction to Neuroscience (NEUR H100).

#### PSYC B280 Laboratory in Computational Neuroscience (0.5 Unit)

This writing-intensive laboratory course offers students hands-on experience in conducting computational neuroscience research. Through lab projects, students will develop research questions, perform literature reviews, apply computational theories to interpret existing findings, and run model simulations. They will write an APA-style manuscript and give an oral presentation. This course will use the Python programming language. Prior programming experience is helpful, but not required. This is a 0.5-unit writing-intensive class that meets half of the writing requirement for the major. Prerequisites: (PSYC B105, or PSYC H100, or NEUR 100) AND (PSYC B205, or PSYC H200, or MATH H103, or MATH H203, or MATH B104, or ECON H203) AND (PSYC B265, or PSYC B218, or PSYC H217, or PSYC B212, or PSYC H260) or permission of instructor.

#### PSYC B281 Laboratory in Counseling Psychology (0.5 Unit)

This writing-intensive laboratory course will offer experience in conducting psychological research in the area of counseling psychology. This course involves designing a study to answer a research question relevant to counseling psychology, including conducting a literature review, identifying appropriate research methods, statistical analysis, interpretation of results and intensive writing in the format of an APA-style research manuscript. This course will also emphasize expanding students' self-awareness about how privilege and oppression related to gender, race, sexual orientation, and other forms of social identity influence how we conduct and interact with research.. This is a .5 unit course that meets for the first half of the semester.

#### PSYC B283 Laboratory in Developmental Psychology (0.5 Unit)

This laboratory course is designed to provide students with hands-on exposure to the principles and practices that guide scientific research on human psychological development. Topics will vary by section, and students can take any section of PSYC 283 (Early Childhood; Adolescence; Cognitive Neuroscience) for credit toward meeting the lab requirement in the major. This course is writing intensive and, as a 0.5 unit class, is designed to meet half of the writing requirement in the major. This is a 0.5 unit course that meets for the full semester. Prerequisite: Psych 105 (Introductory Psychology) and Psych 205 (Methods and Statistics); Suggested preparation: Psych 206 (Developmental Psychology) or Psychology 211 (Lifespan Development) or PSYC B208 (Social Psychology) is helpful, but not required.

#### PSYC B284 Lab in Health Psychology (0.5 Unit)

This laboratory/writing intensive/scientific inquiry quarter course will provide a hands-on experience conducting health psychology research and writing APA-style manuscripts. Students will be exposed to various aspects of the scientific process such as: literature reviews, hypothesisgeneration, data collection, analysis, writing (drafting and polishing), peerreviewing, and oral dissemination of scientific findings. The course will focus on biopsychosocial theory and challenge students to apply the theory to their own research project(s) and write papers on the results. Prerequisite: PSYC B205.

#### PSYC B285 Laboratory in Cultural Psychology (0.5 Unit)

This writing-intensive laboratory course will provide students an opportunity to learn the entire process of psychological research in a small scale. Students will formulate research questions within the area of cultural psychology, review the relevant literature, collect, code, and analyze data, and produce APA-style manuscripts. This lab course will expose students to qualitative, quantitative, and mixed-method approaches to investigating research questions in cultural psychology. Prerequisites: Psych 105 (Introductory Psychology) and Psych 205 (Methods and Statistics);Suggested preparation: Psych 224 (Cross Cultural Psychology) is helpful, but not required.

#### PSYC B286 Laboratory in Behavioral Neuroscience (0.5 Unit)

This writing-intensive laboratory course will provide students with experience in the design, implementation, analysis, and presentation of behavioral neuroscience research. Students will partake in experiments that explore the relationship between the brain and behavior, using Sprague Dawley rats as a model organism. Students should expect to write research reports on experiments performed in the lab, as well as give an oral presentation on research conducted. Prerequisites: (PSYCB105, PSYCB100 or NEUR100) AND Either (PSYCB205, PSYCH200, MATHH103, MATHH203, MATHB104, or ECONH203)

#### PSYC B287 Laboratory in Cognitive Neuroscience (0.5 Unit)

This writing-intensive laboratory course will provide students with handson experience in the design, implementation, analysis, and interpretation of the electrophysiological techniques used in cognitive neuroscience research. Students will read research articles, design an event-related potential (ERP) research project, learn to collect ERP data, conduct EEG/ ERP data analysis to test original hypotheses using existing data, and write an APA-style paper. This is a .5 unit writing-intensive class that meets half of the writing requirement in the major.

#### PSYC B288 Laboratory in Social Psychology (0.5 Unit)

This writing-intensive laboratory course will offer experience in conducting psychological research in the area of social psychology. The course involves coming up with a research question relevant to social psychology, conducting a literature review, designing and conducting research (identifying correct research method), statistical analysis (measurement and reliability, identifying and running the appropriate statistical test), interpretation of results and writing up an APA-style manuscript of a journal article in psychology. This is a 0.5 unit course that meets the first half ofl semester. Prerequisites: PSYC 205 (Methods and Statistics); Suggested Preparation: PSYC208 (Social Psychology) is strongly recommened, but not required.

#### PSYC B289 Laboratory in Clinical Psychology (0.5 Unit)

At its core, this laboratory course is designed to explore how it is that psychologists come to know (or think they know) things and how they communicate what they think they know. The class focuses on the scientific principles and practices underlying research in psychology with an emphasis on techniques and topics important to the subfield of clinical psychology. This course is intended to provide hands-on training in how to conduct research. Through lab activities and class projects, students will learn about important methodological issues and steps in the research process including how to identify important questions, measurement issues such as reliability and validity, different modes of data collection, and how to collect, analyze, and interpret data. This class is a writing intensive class and, as a .5 unit class, is designed to meet half of the writing requirement in the major. Prerequisite: Psych 205 (Methods and Statistics); Suggested preparation: Psych 209 (Abnormal Psychology) is helpful, but not required.

#### PSYC B299 Topics in Psychology (1 Unit)

This is a topics course. Course content varies. This course will provide students with an overview of a subfield of psychology, deepening exposure to the breadth of an expansive field. Topics will rotate.

#### PSYC B315 Stress Neuroscience (1 Unit)

This course will examine the neural mechanisms underlying physiological and emotional responses to stress. We will explore how stress influences susceptibility to substance use and mental health disorders. We will investigate the physiological effects of stress on the immune system, gut microbiome, and feeding behavior, the effects of stress across the lifespan and in offspring, as well as strategies to build resilience. Students will also be exposed to primary literature on these topics and expected to present these articles in a journal club format. This course is designed to provide students with the skills necessary to evaluate recent findings and trends in stress research. Suggested preparation: PSYCB218 (Behavioral Neuroscience) or equivalent.

#### PSYC B316 Advanced Topics in Neuroscience (1 Unit)

This is a topics course. Topics content varies..Prerequisite: PSYC B218 or BIOL B202 or PSYC H217. PSYC 205 is strongly recommended.

#### PSYC B318 Data Science with R (1 Unit)

In this course, students will build and practice data science skills to tidy up disorganized real-world data sets, generate eye-catching visualizations, and craft easy-to-interpret, polished end-products in the R programming environment. Topics include experimental design, building statistical models, and visualizing uncertainty. Students will work throughout the term on an independent data science project leveraging real-world data to investigate their hypotheses culminating in a data blitz presentation. Students will learn how to respond to coding challenges with a puzzle-solving, growth-oriented mindset. No prior R experience is not required. Prerequsites: Required PSYC B205 (Bryn Mawr - Research Methods and Statistics), OR PSYC H200 (Haverford - Research Methods).

#### PSYC B320 Helping Skills: Theory and Practice (1 Unit)

What does it mean to help someone? What specific skills can we use to help people feel seen, heard, and understood? This course provides students with in-depth exposure to theories and research regarding effective helping relationships, with a focus on applications to counseling and psychotherapy. Students will learn skills used to assist others in exploring feelings and thoughts, gaining insight, and taking action. Students will practice helping skills with each other and will conduct research projects evaluating their helping skills. This course will also emphasize students' explorations of their own and others' biases, beliefs, and stigmas related to sociocultural and social justice issues that affect helping skills. Prerequisite: PSYC B205

#### PSYC B322 Everyday Coping Across Culture (1 Unit)

How do people from different cultural backgrounds cope with stress, regulate emotions, and navigate everyday conflicts? This course explores the diverse strategies individuals use to manage challenges outside of clinical settings, with a particular focus on the role of social support -such as seeking advice, receiving emotional support, and engaging in acts of sacrifice. We will examine how these coping strategies vary across cultures and contexts, shaping well-being and interpersonal relationships. Children develop coping skills in both home and school settings, learning how to manage stress, regulate emotions, and navigate social interactions. Parents, teachers, and other socializing agents play a crucial role in this process by instilling moral values, cultural norms, and effective emotion regulation strategies. Students will engage with empirical, peer-reviewed journal articles, learning to integrate findings, critically analyze research, and generate new questions. Prerequisite: Research Methods and Statistics (PSYC B205 or PSYC H200) and either PSYC 224 (Cultural Psychology), PSYC B211 (Lifespan Development) or PSYC 208 (Social Psychology).

# PSYC B323 Advanced Topics in Cognitive Neuroscience (1 Unit) This is a topics course. Course content varies.

#### PSYC B327 Adolescent Development (1 Unit)

Is adolescence a biologically distinct stage of life, or a social "holding ground" invented by modern culture for young people unready or unwilling to assume the responsibilities of adulthood? Are adolescents destined to make risky decisions because of their underdeveloped brains? At what age should they be held accountable as adults in a court of law? This course will explore these and other questions about the biological, social, and legal forces that define the boundaries and shape the experience of adolescents growing up in the modern world. Students will learn about: (1) historical changes in understanding and treatment of adolescents; (2) puberty-related biological changes marking the beginning of adolescence; (3) brain, behavioral, cognitive, and social development during adolescence; and (4) contemporary debates regarding age of adult maturity, and their implications for law and policy. Prerequisite: PSYC B206 (Developmental Psychology) or PSYC B211 (Lifespan Development) or permission or instructor. PSYC B205 is recommended.

#### PSYC B330 Reproducible Research in Psychology (1 Unit)

How do we know what we know and what we don't know in empirical science? Can we trust the peer review process to filter out invalid claims and identify the claims with enough evidentiary support to merit inclusion in The Literature? This course has two primary aims. The first is to introduce students to the recent history and major conclusions of the "Open Science" reform movement in psychology and related sciences. Students will learn about the structural and methodological factors that are potentially responsible for the high proportion of false positive findings in psychology. The second aim is to introduce modern best practices in research design and statistical computing, which prioritize error control, transparency, and reproducibility. The course will provide a very gentle introduction to the R programming language, which students will use to produce a simple but fully reproducible statistical analysis in the format of a scientific report. Prerequisites: PSYC B205 or PSYC H200 or similar introduction to Research Methods and Statistics.

#### PSYC B331 Health Behavior and Context (1 Unit)

This seminar will be devoted to a discussion of theory and research in health psychology. We will investigate both historical and contemporary perspectives on the psychology of wellness and illness. We will begin with a consideration of how psychosocial forces influence health cognitions, behaviors, and physiological processes. The second half of the course will focus on contextual factors, interventions, and emerging topics in research. We will debate the question of whether/how psychological forces influence health outcomes. Prerequisite: PSYC B105 and PSYC B231 or PSYC B208, or by permission of the instructor.

#### PSYC B332 Unlocking the self-control toolbox (1 Unit)

What is self-control? Can it be learned? Or is it something that people either "have" or "don't have"? This course will explore these questions and others, including which psychological processes and concrete strategies allow people to effectively regulate their thoughts, feelings, and behaviors to meet their goals; to what extent self-control is effortful; and how it works for different people in different situations and cultural contexts. Students will learn about influential theoretical models of self-control and emotion regulation, considering how people can use attention, their mind, the external environment, and social relationships to enact self-control successfully. Students will read empirical, peer-reviewed journal articles throughout this course, learning to synthesize; critically evaluate; and extend them, by asking new questions. Prerequisite: Research Methods and Statistics (PSYC B205 or PSYC H200) and either Psych 208 (Social Psychology), Psych 209 (Clinical) or Psych 224 (Cultural)

#### PSYC B344 Early Childhood Experiences & Mental Health (1 Unit)

Development represents a unique period during which the brain shows enhanced plasticity, the important ability to adapt and change in response to experiences. During development, the brain may be especially vulnerable to the impacts of harmful experiences (e.g., neglect or exposure to toxins) and also especially responsive to the effects of positive factors (e.g., community resilience or clinical interventions). This seminar will explore how childhood experiences "get under the skin," shaping neurobiological systems and exerting lasting effects on mental health and well-being. We will examine theoretical models of how early experiences shape development, considering the proposed mechanisms by which different features of childhood environments could shape psychological risk and resilience. We will evaluate the scientific evidence for these models and then apply this knowledge to consider what strategies for intervention -- at the level of the child, family, and society -- could help reduce psychopathology and promote well-being. There is no textbook required for this course. We will read, critically evaluate, and discuss empirical journal articles and explore the implications of this scientific literature for public policy. Prerequisites: PSYC B209 or PSYC B206 or PSYC B218 or permission from instructor; PSYC B205 highly recommended

# PSYC B352 Advanced Topics in Developmental Psychology (1 Unit) This is a topics course. Topics vary. Prerequisite: PSYC 206 or PSYC B211 or the consent of the instructor.

#### PSYC B353 Advanced Topics in Clinical Psychology (1 Unit)

This course provides an in-depth examination of research and theory in a particular area of clinical psychology. Topics will vary from year to year.

#### PSYC B354 Asian American Psychology (1 Unit)

This course will provide an overview of the nature and meaning of being Asian American in the United States. We will examine the history, struggle, and success of Asian Americans, drawing upon psychological theory and research, interdisciplinary ethnic studies scholarship, and memoirs. Students will also learn to evaluate the media portrayal of Asian Americans while examining issues affecting Asian American communities such as stereotypes, discrimination, family relationships, dating/marriage, education, and health disparities. Prerequisite: Introduction to Psychology (Psych 105) is required, Research Methods and Statistics (Psych 205) is recommended..

#### PSYC B358 Neuroscience of Adaptive Decision-Making (1 Unit)

How do humans and animals make adaptive decisions? What cognitive and neural mechanisms help us choose well, and what constraints get in the way? In this course, we will explore models of optimal decision-making and examine when, why, and how real-world choices deviate from them. We will consider how psychological, neuroscientific, and computational approaches each shed light on how decisions unfold in different contexts. Students will read and discuss peer-reviewed articles, connect theory and empirical data, and frame new questions through a theoretical lens. Prerequisite: Research Methods and Statistics (PSYC B205 or PSYC H200) and either PSYC B265 (Computational Neuroscience) or PSYC B212 (Human Cognition) or PSYC B218 (Behavioral Neuroscience) or permission from instructor.

#### PSYC B395 Psychopharmacology (1 Unit)

A study of the role of drugs in understanding basic brain-behavior relations. Topics include the pharmacological basis of motivation and emotion; pharmacological models of psychopathology; the use of drugs in the treatment of psychiatric disorders such as anxiety, depression, and psychosis; and the psychology and pharmacology of drug addiction. Prerequisite: PSYC B218 or BIOL B202 or PSYC H217 or permission of instructor.

#### PSYC B399 Senior Seminar (1 Unit)

This seminar is intended to serve as a capstone experience for senior psychology majors who have opted not to do a senior thesis. The focus of the seminar will be on analyzing the nature of public discourse (coverage in newspapers, magazines, on the internet) on a variety of major issues, identifying material in the psychological research literature relating to these issues, and to the extent possible relating the public discourse to the research.

#### PSYC B400 Senior Thesis (1 Unit)

Senior psychology majors who are doing a thesis should register for Senior Thesis (PSYC B400) with their adviser for both the Fall and Spring semester. Students will receive one unit per semester. Prerequisite: Psychology major.

#### PSYC B403 Supervised Research (1 Unit)

Laboratory or field research on a wide variety of topics. Students should consult with faculty members to determine their topic and faculty supervisor, early in the semester prior to when they will begin.

#### PSYC B425 Praxis III: Independent Study (1 Unit)

Praxis III courses are Independent Study courses and are developed by individual students, in collaboration with faculty and field supervisors. A Praxis courses is distinguished by genuine collaboration with fieldsite organizations and by a dynamic process of reflection that incorporates lessons learned in the field into the classroom setting and applies theoretical understanding gained through classroom study to work done in the broader community. Note: Students are eligible to take up to two Praxis Fieldwork Seminars or Praxis Independent Studies during their time at Bryn Mawr.

#### PSYC B499 Psychology Colloquim (0 Unit)

Majors are also required to attend a one-hour, weekly brown bag in the junior year for one semester. This requirement is designed to sharpen students' analytical and critical thinking skills, to introduce students to faculty members' areas of research, to provide additional opportunities for student-faculty interactions, and to build a sense of community.

#### PSYC B501 Research Methods (1 Unit)

This course deals with psychology research and design methodology. An important purpose of this course is to help graduate students begin their predissertation research projects. Topics include: internal and external validity, reliability, characteristics of various methods (survey, case, observational, and experimental), data coding, levels of measurement, research ethics, and publication. Open only to 1st year graduate students in the Clinical-Developmental psychology graduate program.

#### PSYC B502 Multivariate Statistics (1 Unit)

This course is designed to introduce students to advanced statistical techniques that are becoming increasingly important in developmental, clinical and school psychology research. We focus on understanding the advantages and limitations of common multivariate analytic techniques that permit simultaneous prediction of multiple outcomes. Emphasis is placed on helping students critically evaluate applications of these techniques in the literature and the utility of applying these techniques to their own work. Topics covered include path modeling, ways of analyzing data collected over multiple points in time (e.g., a growth curve capturing change in a developmental variable during childhood), confirmatory factor analysis, and measurement models. Students use existing data sets to gain experience with statistical software that can be used for multivariate analyses.

#### PSYC B508 Social Psychology (1 Unit)

Provides an introduction to basic social psychological theories and research. Topics covered include: group dynamics, stereotypes and group conflict, attitude measurement, and attitudes and behavior. An emphasis is placed on research methods in the study of social psychology.

#### PSYC B510 Developmental Psychology (1 Unit)

This course provides an overview of theory and research relating to the development of children and adolescents within family, school, and cultural contexts and thus serves as a foundation for future work in the department. Following an overview of major developmental theories, we examine topics such as infant perception, infant sociality, prelinguistic communication, attachment, language development, the development of self awareness, early social cognition and theory of mind, conceptual change, memory and learning, parent-child relations, peer relations and gender issues, self-concept and self-perception, moral development, logical thinking, and identity formation. Topics are examined within a multicultural, ecological, and developmental framework.

#### PSYC B512 Human Cognition (1 Unit)

This course explores the cognitive bases of behavior, emphasizing information processing approaches. Major areas of cognitive psychology are surveyed. These areas include perception, attention, memory, language, and thinking and decision making.

#### PSYC B529 Cognitive/Neuropsychology (1 Unit)

This course explores the cognitive bases of behavior, emphasizing an information processing approach. The major areas of cognitive psychology are surveyed. These areas include perception, attention, memory, language, and thinking and decision making. The application of basic knowledge in these areas to developmental and clinical psychology is also explored. In addition, the course deals with the basics of human neuropsychology, providing an introduction to disorders of language, spatial processing, memory, emotion, and planning/attention as a result of brain injury.

# PSYC B540 Intro to Psychological Assmt: Intelligence & Perception (1 Unit)

This course introduces current approaches to identifying the educational needs of children and adolescents through psychological assessment. The major topics include: theoretical conceptualizations of intelligence and learning disabilities/differences within a developmental framework, psychometric concepts as they apply directly to the assessment process, and the use of norm-referenced measures of cognition and informational processing in concert with observations, clinical interviews, and other qualitative information about the strengths and needs of students. Additional topics include issues of culture in assessment, differential validity of standardized tests, the role of dynamic assessment approaches, and multiple perspectives on current classification systems. Assignments entail practice in the administration, scoring, interpretation, and integration of selected cognitive and information processing measures, as well as the communication of findings and their implications.

#### PSYC B541 Psychoeducational & Personality Assessment (1 Unit)

This course serves as a continuation of Psych 540 with emphasis on the assessment of academic skill development, social/emotional functioning, and behavioral functioning with the purpose of aiding in the development of appropriate remedial strategies and clinical recommendations. This course will include an overview of the reading process, and the acquisition of math and writing skills. Students will be introduced to standardized measures of academic assessment as well as informal, curriculum-based, and response to interventions methods of assessment of learning disabilities/differences. Students will also be exposed to a variety of diagnostic and assessment tools utilized for the assessment of social/emotional and behavioral issues including rating scales, observations, interviews, questionnaires, and projective measures. This course will also introduce the students to current approaches in the assessment and/or diagnosis of several specific disorders including Attention Deficit/Hyperactivity Disorder, Autism Spectrum Disorder, and Nonverbal Learning Disabilities. Interpretation and integration of information will be emphasized throughout. Assignments include weekly readings, practice psycho-educational reports, and a final take-home

#### PSYC B551 Developmental Psychopathology (1 Unit)

An examination of research and theory addressing the origins, course, and consequences of maladaptive functioning in children, adolescents, and families. Major forms of childhood and adolescent psychopathology (e.g., antisocial behavior, attention deficit hyperactivity disorder, and depression) are examined and faimly-based risk factors for psychopathology, such as parenting quality and marital conflict, are explored. An important focus of the course is on the identification of risk and protective factors for psychopathology. Topics covered include contrasting models of psychopathology; assessment and classification of childhood disorders; models of individual and family risk; social and cultural factors influencing the development of psychopathology; and therapeutic efforts to prevent or ameliorate disorders.

#### PSYC B561 Intro. to Psychotherapy (1 Unit)

This course provides an introduction to the principles and practice of individual psychotherapy with an emphasis on working with children and adolescents. Students are encouraged to think critically about the nature and process of psychotherapy and to apply creatively their knowledge and skills to the task of helping those in need. emphasis is placed on formulating therapeutic goals and conceptualizing therapeutic change. The course provides an overview of dominant conceptualizations of therapy, especially psychodynamic and cognitive/behavioral approaches. Therapeutic techniques and challenges in work with children and adolescents are presented. Concurrent with the course, students have an introductory therapy experience in a school or clinic in which they conduct psychotherapy with one or two clients and receive supervision.

#### PSYC B595 Psychopharmacology (1 Unit)

A study of the role of drugs in understanding basic brain-behavior relations. Topics include the pharmacological basis of motivation and emotion; pharmacological models of psychopathology; the use of drugs in the treatment of psychiatric disorders such as anxiety, depression, and psychosis; and the psychology and pharmacology of drug addiction. Prerequisite: PSYC 218.

# PSYC B612 Historical Issues in Clinical Developmental Psychology (1 Unit)

Familiarizes students with 20th century developments in clinical psychology and with the 18th and 19th century social and intellectual trends from which they emerged. Topics include: Mesmerism and the rise of dynamic psychiatry in Europe and America; changing patterns in the institutionalization of the insane; the Bost Group (James, Prince, Sidis) and the development of abnormal psychology and psychotherapy; the American reception of psychoanalysis; the Mental Hygiene and Child Guidance movements; the growth of psychometrics; personality theories and theorists; and trends in the professionalization of clinical psychology after WWII.

#### PSYC B623 Family, School, and Culture (1 Unit)

This course will explore three central domains of a child's life - family, the school and how culture influences and is influenced by both. The readings are both theoretical and clinical in nature, designed to provide the student with a broad introductory grasp of the central ideas, research and concepts in each domain. In addition, theory and research are linking with clinical practice for psychologist working in schools or treating children with school problems.

# PSYC B642 Consultation & Practice Issues in School Psychology (1 Unit)

The third and final course in the CDPP psychological assessment sequence, this course prepares students for the professional practice of clinical developmental and school psychology. The course deals with models of special education; consultation approaches in school psychology; categories of exceptionality; multicultural issues in the delivery of school psychology services; principles of educational psychology; the structure and organization of schools; and assessment of preschoolers. The class includes a weekly "Diagnostic and Personality Assessment Lab". While taking this course, and continuing through the second semester, each student works in an assessment practicum in a school, clinic, or pupil service agency. In small weekly lab groups, which are held throughout the academic year, students and instructors discuss ongoing cases and consider such clinical issues as test selection, scoring, report writing, working with parents, consultation, and programming recommendations.

#### PSYC B660 Family Therapy (1 Unit)

This course introduces students to the theoretical and practical foundations of treating couples and families from a systems perspective. Treatment issues are covered through the use of videotapes, didactic presentations, role plays, and student presentations. In conjunction with the weekly one-semester course, students can elect to participate in a one-morning per week family therapy supervision group at CSI. While enrolled in this course, and in the subsequent semester, students engage in psychotherapy practicum in a clinic, school, pupil service agency, or other approved setting arranged by the department.

#### PSYC B690 Ethical Issues in Psychology Seminar (1 Unit)

This course deals with ethical issues in the science and practice of psychology. Students give class presentations and lead discussions about the APA, PA Licensing Board, and NASP Ethics codes, and about professional issues related to academic and applied psychology. It is taught in the year in which students are engaged in their assessment practicum (usually their third year in the program). Specific ethical issues discussed include competence, informed consent, confidentiality, child abuse reporting, and the duty to warn, with particular emphasis on situations likely to arise in the provision of psychological services to children and families. (Discussion of ethical conduct of research and practice also occurs in the weekly Research Brown Bag lunch meeting and in the Research Methods course, as well as in meetings between individual students and their research advisors). (Roberts,C)

#### PSYC B702 Supervised Research (1 Unit)

# DSCI B314 Advanced Data Science:Regression & Multivariate Statistics (1 Unit)

This course is designed to improve your data science skills by introducing you to advanced statistical techniques that have become increasingly important in psychology and a variety of fields. The focus will be on understanding the advantages and limitations of regression approaches and multivariate analytic techniques that permit simultaneous prediction of multiple outcomes. Topics covered will include basic regression approaches, advanced regression strategies, structural equation modeling, factor analysis, measurement models, path modeling, modeling of longitudinal data sets, multilevel modeling approaches and growth curve modeling. Students will gain familiarity with these techniques by working with actual data sets. The last part of each class will be reserved for lab time to apply lessons from class to an assignment due the following week. Students are welcome to stay beyond the noon ending time to complete the assignment. Prerequisites: Required: PSYC Research Methods and Statistics 205 (BMC), Psych 200 (HC) Experimental Methods and Statistics, or BIOL B215 Experimental Design and Statistics. Students with good statistical preparation in math or other disciplines and some knowledge of core methods used in social science or health-related research should consult with the instructor to gain permission to take the class. This course was formerly numbered PSYC B314; students who previously completed PSYC B314 may not repeat this course.

#### HLTH B302 Survey Methods for Health Research (1 Unit)

Surveys are widely used to measure the population prevalence of various health conditions; to better understand the scope and impact of exposure to social and economic stressors on population health; to monitor health-related knowledge, attitudes and practices; and to inform health systems strengthening efforts. Through course material and hands-on experience, students will master the basic elements of survey design, including, operationalizing constructs and formulating research questions, choosing a mode of survey implementation, pretesting the survey instrument, designing a sampling plan, managing field operations, and analyzing and interpreting survey data. Prerequisites: Completion of a 200-level course in the social sciences or permission of the instructor.