

## Spring 2019 Depth and Capstone Courses

### Spring 2019 Depth Courses

**Psychology 505** (Honors section offered)

**Animal Cognition (BIC)**

Professor Allyson Bennett

In this course we will engage in active learning to better understand animal cognition. The course focuses on questions in comparative psychology: What do animals think? How are psychological processes similar and different across species? How do animals' different physical characteristics, nervous systems, environments, and life histories give rise to learning and cognitive processes that allow them to meet challenges in their lives?

We will read, think, talk, and write about scientific studies of cognition in many kinds of animals. You will learn about how different animals perceive their worlds, how they learn, solve problems, navigate through space, and interact with others. We will study similarities and differences between animals that are closely and distantly related and between animals that live in similar environments and environments that are very different. You will learn about what these comparisons can tell us about the evolution, neural underpinnings, and experiential factors that contribute to cognitive processes. Throughout the course, you will refine your ability to critically evaluate claims about animal cognition and gain a deeper understanding of psychological science.

Special Note: This class will also follow a blended format, which will require active online discussions.

*Pre-Reqs:* Sophomore standing **and** completion of the Psych Bio requirement: Zoo 101/102 **OR** Zoo 151 **OR** BIOCORE

**Psychology 513** (Honors section offered)

**Hormones, Brain, and Behavior (YIC)**

Professors Anthony Auger and Catherine Marler

This course is an introduction to the effects of hormones (endo) on brain (neuro) and behavior in nonhuman and human models. We will discuss topics related to how hormones and the environment interact to influence brain development and ultimately behavior. Additional topics include neuroendocrine control of female and male sexual behavior, epigenetics, sexual orientation, juvenile play behavior, eating disorders, parental behavior, affiliative (pair bonding) and aggressive behavior, communication (bird song), and stress. Overall, this course will emphasize how hormones act in the brain to influence both juvenile and adult social behavior.

*Pre-Reqs:* Sophomore standing **and** completion of the Psych Bio requirement: Zoo 101/102 **OR** Zoo 151 **OR** BIOCORE

**Psychology 525** (Honors section offered)

**Cognition in Health and Society (SIC)**

Professor Joseph Austerweil

This course covers how topics from cognitive psychology shed light on current issues in health and society. Topics include attention, memory, categorization, reasoning, decision making and problem solving. Issues include distracted driving, traumatic brain injuries, anxiety, dementia, eyewitness testimony, stereotype, and individual differences (e.g., autism spectrum disorders and expertise). It will focus on how experimental results and formal theories from each topic can be applied to understand current issues better and improve people's lives.

*Pre-Reqs:* Any Psychology Breadth level course

## **Psychology 526**

### **Criminal Mind: Forensic and Psychobiology Perspectives (SIC)**

Professor Patricia Coffey

Criminal behavior is an extremely common and costly problem for society. The problem reflects diverse origins ranging from constitutional factors, such as psychopathy, to social factors, such as the consequences of living in impoverished neighborhoods. The problem also presents diverse challenges, including the assessment of culpability and the treatment/prevention of criminal behavior. Using a mix of lectures and experiential exercises, this course will cover a range of theoretical, empirical, and applied material and provide a foundation for conceptualizing key issues related to the criminal mind and behavior.

It is our goal for students to complete this course with an in-depth understanding of criminal psychology and the relevant forensic and psychobiological processes in this field. In order to accomplish this goal, we will meet as a large group two times a week for lectures and also provide weekly discussion section meetings. The aim of the discussion sections is to allow for more individual discussion of the lecture material and primary source readings, hands-on experience with assessment materials, and opportunities to debate some of the key issues faced by clinical psychologists, forensic psychologists, and legal scholars.

*Pre-Reqs:* One of the following courses, Psych 403 (Previously 507), **OR** Psych 405 (Previously 509) **OR** Psych 511 **OR** Psych 512 **OR** Psych/Soc 456 (Previously 530)

## **Psychology 532**

### **Psychological Effects of the Internet (SIC)**

Professor Morton Gernsbacher

Google the question, “How is the Internet changing the way we think?,” and you will find no shortage of opinions – or fears. In this course, students will examine empirical evidence for whether the Internet is changing the way we think, communicate, socialize, play, and learn. The course will enroll 96 students, divided into eight learning sections of 12. Students will be expected to read and synthesize original research literature, which will be augmented with readings and videos from the popular press (Wired magazine, Edge, TED talks). Assessment will be based on the quality and timeliness of completing multiple assignments per week, including interactive discussions (conducted asynchronously, through a discussion board, and synchronously, through text-based chat). Therefore, students will be expected to engage with the course multiple times per week. At the end of the course, each student will produce a term project, which can be a research-based essay. There will be no textbooks to buy or timed exams to take. **IMPORTANT NOTE: This is a completely online course; STUDENTS ARE REQUIRED TO HAVE DAILY ACCESS TO HIGH-SPEED INTERNET and MUST READ <http://go.wisc.edu/kuehca> PRIOR to registering for the course.**

*Pre-Reqs:* Any Psychology Breadth level course

## Spring 2019 Capstone Courses

Psychology 601 – lec. 1

### **Media and Mental Illness**

Professor Diane Gooding

This course will focus on the portrayal of mental illness in popular culture. Sources will include articles and editorials from periodicals (newspapers and magazines), excerpts from novels, short stories, advertisements, television programs, documentaries, and movies. Additionally, we will access social media such as podcasts, blogs, and YouTube as appropriate. These media portrayals will be compared to information provided via scholarly journals as well as other sources of current scientific knowledge about mental illness and treatment of mental illness. Rather than attempt to cover a broad array of psychiatric/psychological disorders, we will focus on a few disorders to examine the ways in which information regarding mental illness is presented, the ways in which people with mental illness are portrayed, and the impact of the media portrayals on personal, social, political, and legal decision-making.

Psychology 601 – lec. 2

### **Epigenetics and the Brain**

Professor Anthony Auger

Nature versus nurture can now be referred to as understanding gene X environmental interactions. That is, the emerging area of epigenetics is the study of how the environment can reprogram the genome. In some cases, this reprogramming can be passed onto future generations. Epigenetics is the study of changes to gene activity without changing the underlying code. This course will focus on how our behavior and overall health can be shaped by markings on our DNA. For the first part, we will cover a general background on how epigenetic changes occur and how they shape behavior. During the second part, we will examine various topics in greater depth by discussing the primary research articles that shaped those topics. Finally, you will orally defend a research proposal on a topic of your choice, as well as hand in a final written research proposal on the same topic.

Psychology 601 – lec. 3 and 4

### **Mood Disorders**

Professor Lyn Abramson

In this course, we will examine psychological and biological approaches to unipolar depression and bipolar disorder. Scientific theory and research will be emphasized, and creative, analytical thinking will be encouraged. We also will translate scientific research into clinical practice. The goals of the course exams are to facilitate students' skills in thinking about and evaluating scientific research as well as in presenting scientific research and theory in a written format. In addition, exams will help students learn to translate research about unipolar depression and bipolar disorder into clinical practice. A goal of class discussions is to provide students with an opportunity to improve their skills in discussing scientific theory and research. Finally, students will participate in role plays to instantiate course concepts.

Psychology 601 – lec. 5

**Legal Psychology: Criminal and Civil Issues**

Professor Gregory Van Rybroek

This class brings together two distinct disciplines – that of empirical and clinical methods found in the area of psychology, and that of substantive and procedural methods found in the legal system when social problems call for decisions and dispositions. The course is intended to provide students with understanding about how one system, founded on empirical results, interplays with another system rooted in pragmatics and rules. The course also focuses on problematic social issues, where we see the combination of psychiatric systems, or psychological processes, organized in overarching legal structures and driven by the rule of law. The class presents legal psychology "in action" as the vehicle for making the issues more real through actual examples, videotapes, dialogue and debate. We also will be visiting a psychiatric institution that specializes in handling the most complex of forensic and clinical cases. Thus, while there is a very academic aspect to the instruction, the key to a worthwhile learning experience will be in transferring the academic issues to their real-world place. In this way, the student can learn about the rich and complex interplay that takes place when the clinical and legal worlds intersect over serious mental health problems. Topic areas typically include: insanity defense, competency to stand trial, civil commitment, confession and eyewitness evidence, jury decision-making, risk assessments, child abuse, child custody, syndrome evidence in court, juvenile offenders and treatment, public mental health systems, and the role of forensic psychologists in court related activities.

Psychology 601 – lec. 6

**Psychology of Juvenile Delinquency**

Professor Michael Caldwell

This is an upper-level undergraduate seminar course focused on forensic psychology of juvenile delinquents. Course material will address social and legal issues related to adolescent development and delinquent behavior. The course will cover issues in the field of juvenile delinquency and violence, criminal prosecution of juvenile cases, and other issues involved in the interface between child psychology and the legal system. The course format emphasizes discussion of current issues in the field of the law and adolescent psychology. Students will be expected to demonstrate a thorough understanding of the material, and to formulate and express their own opinions on relevant issues. The emphasis on class discussion is based on two assumptions. The first is that nearly all professional positions rely on the individual's ability to persuade others either in a one-to-one setting or, more commonly, in group settings. Thus, the ability to present a cogent and persuasive explanation of a concept, understand and consider alternative and opposing concepts and deal with questions effectively are fundamental skills. The second assumption is that all aspects forensic psychology, (and in particular juvenile delinquency) involve the skill of understanding a point of view and a way of thinking that is foreign or repugnant to you, and being able to influence that point of view. This is true in the assessment and treatment of delinquents as a psychologist, in the adjudication process as an attorney, and in the public policy arena.

Psychology 601 – lec. 7

## **Fundamentals of Clinical Psychology**

Professor Rhonda Reinholtz

This class is an exploration of research and clinical issues related to psychotherapy. The course is focused on thinking about how best to study clinical questions related to therapy outcomes, including issues such as the therapeutic alliance and how to gauge whether therapy interventions are effective. The course content will introduce students to selected aspects of psychotherapy, such as the APA ethics code as it applies to psychotherapy, concepts such as resistance and transference, and forms of therapy including play therapy, group therapy, and couples therapy. Discussion of psychotherapy concepts will revolve around the question of how they are studied and the quality of the existing research literature; early in the class students will read several perspectives on research methodology within clinical psychology and will be expected to apply those perspectives, as well as their own critical thinking skills, to questions regarding psychotherapy processes. The class requires daily readings and informal written homework as well as two exams, short writing

Psychology 601 – lec. 8

## **Nature and Nurture**

Professor James Li

When it comes to mental illness, what's more important: genes or how you were raised? The question of nature versus nurture has been debated for centuries and has often ignited heated debates and controversies. Today, the issue is no longer a question of nature *versus* nurture (nearly all experts agree that both are important) but has shifted to: how does nature *interact* with nurture to produce a mental disorder? For instance, how do your genes affect the way you respond to stressful life events? If a disorder is highly heritable (e.g., autism spectrum disorder), what can we do to prevent its course for happening? Answers to these questions will have profound implications on public policies and treatments. This course will draw upon perspectives and methods from philosophy, sociology, epidemiology, medicine and genetics, and psychology to explore the role of both genes and environments as they affect human behavior broadly, and mental illness more specifically.

Psychology 601 – lec. 10

## **Developing Babies, Building Robots**

Martin Zettersten

What would it take to build a robot that could learn as well as a human infant? To answer this question, we will dive deeply into theories of how children learn about the world around them and how these insights connect to advances in artificial intelligence. What comes easily to babies, but is hard for machines to do? What can machines learn to do easily that children (and sometimes even adults) struggle with? Using these questions as a thread throughout our conversations, we will explore in parallel advances in our understanding of child development and advances in artificial intelligence across a range of topics, such as perception, motor development, language, and social cognition. Why are children better than adults at learning language, and what does this mean for designing language processing algorithms? How do babies learn to explore their social world, and why is it so hard to make a 'social' robot? As part of our conversations, we will also bring into focus the impact these insights can have on society, from early childhood intervention to education practices.