



Clarkson

Clarkson University
Department of Psychology
Student Handbook
2020 - 2021

**PSYCHOLOGY HANDBOOK
DEPARTMENT OF PSYCHOLOGY
CLARKSON UNIVERSITY**

I.	General Information	3
II.	Introduction	3
III.	Why Study Psychology?	3
IV.	Careers in Psychology	4
V.	Internship and Research Opportunities	6
VI.	Requirements for the Psychology Major	
	1. Clarkson Common Experience and free electives	7
	2. Psychology Course Requirements	8
	3. Sample Curriculum	9
VII.	Requirements for Psychology Minors and Concentrations	
	1. Minor in Psychology	10
	2. Minor in Cognitive Neuroscience	10
	3. Minor in Biology, Behavior and Society	11
	4. Professional Concentration in Health Psychology	12
VIII.	Psychology Course Descriptions	13
IX.	Advising Sheet	23

I. GENERAL INFORMATION

Web site: <https://www.clarkson.edu/academics/arts-sciences/psychology>

email: awilke@clarkson.edu

phone: 1-800-527-6577 ask for Psychology Department, or call (315) 268-2342

Faculty: Associate Professor: Jennifer Knack, Lisa Legault, Andreas Wilke

Assistant Professor: Lauren Petley, Elizabeth Pienkos

Adjunct Instructor: Gary Kelly

Professor Emeritus: Robert Dowman

More information about the Psychology Department faculty can be found at:

<https://www.clarkson.edu/academics/arts-sciences/psychology/faculty-staff>

II. INTRODUCTION

Psychology is the study of mind and behavior. Its explorations span an enormous breadth, ranging from the activity of individual brain cells to the complex interactions between individuals and society. Psychology investigates how people develop and learn; how we perceive the world; how relationships are formed; how stress affects our health and impairs our performance; and why conflict is so much a part of the human experience. Psychologists also try to understand the nature and causes of abnormality and search for effective treatments to relieve the suffering it causes.

The Psychology program at Clarkson aims to provide each student with a solid foundation in the fundamental areas of psychology, as well as the opportunities to develop the problem solving, critical thinking, and communication skills that are critical in the workplace. We also strive to help students find interesting and rewarding careers related to psychology. To this end, each Psychology major is given lots hands-on learning opportunities. These include the directed research, where the student works closely with a faculty member on an experiment of mutual interest; clinical internships, where the student works with a therapist in a clinical environment; and industrial/organizational psychology internships where, the student works with psychologists in business settings.

III. WHY STUDY PSYCHOLOGY?

Psychology graduates have a lot of valuable skills that can be applied to a wide variety of careers. The most obvious skill is the basic understanding of human behavior and thought processes. However, the problem solving and communication skills that Psychology majors develop during the course of their training are just as, if not more, important. These skills include being able to formulate a problem; acquire the information needed to solve the problem, either through researching the existing literature or designing methods to collect new data; analyzing and interpreting the information (e.g., correctly applying statistics); integrating the information and applying it to the problem; and communicating the solution to others, in either oral or written form. Importantly, Psychology majors know how to apply these skills directly to

problems involving people. The Psychology degree at Clarkson is specifically designed to help students acquire these skills.

IV. CAREERS IN PSYCHOLOGY

This section provides a very brief listing of the types of careers that are available to Psychology majors. For more detailed descriptions, visit the recent graduates page on our web site, and have a look at: T. L. Kuther & R. D. Morgan (2010) *Careers in Psychology: Opportunities in a Changing World* Boston MA: Wadsworth, Cengage Learning. We have copies of this book in the Psychology office that you can borrow. Another very helpful resource for career planning is R. N. Bolles (2012) *What Color Is Your Parachute: A Practical Manual for Job Hunters and Career Changers*, Berkeley CA: Ten Speed Press.

Psychology is an excellent major for students interested in careers as lawyers, health care providers (e.g., physician, physical therapist, physician assistant, occupational therapist), and business leaders (e.g., MBA). All of these areas require an ability to understand and deal with people, problem solve, think critically, and communicate. These are skills that all psychology graduates should have. There are also a wide variety of careers that are directly related to psychology. These include:

1. **Clinical Psychologists** assess and treat people with psychological problems, such as anxiety and depression. Careers in this area require a graduate degree in Psychology.
2. **Counseling Psychologists** foster and improve normal human functions across the life span by helping people solve problems, make decisions, and cope with stresses of everyday life. Careers in this area require a graduate degree in Psychology.
3. **Developmental Psychologists** study human development across the life span. Career opportunities with a bachelor's degree include gerontology aide, child life specialist, and non-profit organizations dealing with children. Opportunities with a graduate degree include scientist/practitioner, product development and media consultant, and social policy research.
4. **Educational Psychologists** study how people learn, and develop the methods and materials used to educate people of all ages. Recently there are increasing possibilities in the military and industry for doctoral level educational psychologists. New opportunities in evaluation of social problems and policies are opening for those with master's degrees.
5. **Forensic and Legal Psychologists** apply psychology in legal settings. Opportunities with a bachelor's degree include police officer, correctional officer, probation & parole officer, juvenile detention worker, and forensic science technician. Opportunities with a graduate degree include correctional psychology, forensic examiner, police psychologist, trial consultant, criminal profiling, and political consulting.

6. **Health Psychologists** are concerned with how psychological variables (e.g., personality traits, stress, etc.) and social environments (e.g., family and community support) affect both mental and physical health. Careers opportunities with a bachelor's degree include recreational therapist, occupational therapy assistant, physical therapy assistant, and health educator. Opportunities with a graduate degree include research and teaching in academic settings, service delivery settings, and public health settings.
7. **Industrial/Organizational Psychologists** are concerned with the relationship between people and the workplace. There are 3 main areas in I/O Psychology:
 - a. **Consumer Psychologists** help organizations understand how and why consumers choose certain products over others and to find out what consumers want. Career opportunities with a bachelor's degree include advertising, real estate, retail, and public relations. Opportunities with a graduate degree include market research and product development consultant.
 - b. **Environmental Psychologists** study the interaction between people and their environments. This knowledge is applied to the design of the work place, hospitals, schools, etc. to maximize productivity and efficiency, reduce stress, and minimize risks. Careers in this area require a graduate degree.
 - c. **Human Resource Management.** Human Resource Managers recruit employees, provide training and development activities to help employees achieve their best, organize and implement performance appraisals, ensure that employees and management practices conform to government regulations, and manage employee benefits and compensation, employee records and personnel policies. Opportunities at the bachelor's degree level include human resource generalist, recruiting and placement specialist, training and development specialist, and compensation and benefits specialist. Opportunities at the graduate degree level include consultant and usability specialist.
8. **Neuropsychologists** administer psychological tests to evaluate cognitive and behavioral function following brain injury, and design and administer rehabilitation programs to help the patient regain function. This career tract requires a doctoral degree in Neuropsychology.
9. **Psychometrics, Quantitative, & Experimental Psychologists** are concerned with methods and techniques used in acquiring and applying psychological knowledge. Career opportunities at the bachelor's degree level include insurance underwriter, computer programmer, computer support specialist, and budget analyst. Opportunities at the graduate degree level include

operations research analyst, computer systems analyst, database administrator, actuary, financial analyst, and data mining.

10. **School Psychologists** are concerned with the intellectual, educational, social and emotional development of children. Opportunities at the bachelor's level include teacher, childcare worker, teaching assistants, and early childhood behavioral specialist. Opportunities at the graduate degree level include school psychologist and school counselor.
11. **Sports Psychologists** help athletes perform their best. This can be accomplished by teaching the athlete visualization techniques, stress management, and team building skills. Sports Psychologists also work with coaches helping them become better at leading and motivating teams. Opportunities at the bachelor's degree level include fitness instructor, recreational worker, physical education teacher, sport instructors, coaching, and sport reporting. Career opportunities at the graduate level include research and teaching in academic settings, and private practice/consulting.

V. INTERNSHIP AND RESEARCH OPPORTUNITIES

Each psychology major has the opportunity to apply knowledge gained in the classroom through the directed research and internship courses. In the directed research students work one-on-one with faculty members on a research topic of mutual interest. A list of our faculty and their research interests can be found at:

<https://www.clarkson.edu/academics/arts-sciences/psychology/faculty-staff>

For students interested in pursuing careers in clinical psychology, there are a number of clinically-oriented internships, including the Ogdensburg Psychiatric Facility, the Canton-Potsdam Hospital Substance Abuse Detoxification and Rehabilitation Unit, New York ARC, Renewal House, and the Reachout Crisis hotline. Business-related internships are also available at local businesses and at Clarkson's Human Resources Department. Students can also develop their own internship experience either in Potsdam, at home over the summer, or elsewhere. Indeed, the internship could involve any worker or volunteer experience that is related to Psychology. Check with your advisor for details.

Please see the syllabi for PY496 (Directed research) and PY400/401/402/403 (Internship) for further details. Your academic advisor can provide you with a copy of them.

VI. REQUIREMENTS FOR THE PSYCHOLOGY MAJOR

1. Clarkson Common Experience and Free Electives

- A. Clarkson Common Experience - 39 credit hours (required for all majors at the University)
 - The Clarkson Seminar (3 credits)
 - First Year Seminar (1 credit)
 - Technology Serving Humanity (3 credits)
 - 3 courses in Mathematics (numbered 100 or above - one of which has to be Calculus and one Statistics (9 Credits)
 - 2 courses in Natural Science - one of which has to include a lab (8-9 credits)
 - 5 courses covering at least the 4 of the 6 knowledge areas (15 credits)

- B. Psychology Course Requirements - 32 credit hours
 - The 11 Psychology courses required for the major are described below.

- C. Free Electives - 49 credit hours
 - The psychology major allows room for 49 elective hours. These electives can come from any aspect of the university including Psychology. The flexibility of the major often allows a student to complete the requirements for another major in the four year span. Such double majors are valuable in today's job market. The department will tailor a program for those students interested in double majoring. Our goal is to meet each student's individual needs, interests, and career goals.

2. Psychology Course Requirements

Required - (must take all)

PY151 Introduction to Psychology
PY253 Social Psychology
PY255 Cognitive Psychology
PY456 Experimental Psychology
PY457 Experimental Psychology Lab

Research/Internship Requirement - (must take 1)

Directed Research (PY496)
Internship (select 1 from PY400, PY401, PY402, PY403)

Physiological requirement - (must take 1)

PY/BY454 Physiological
PY/BY458 Cognitive Neuroscience
PY/BY460 Neurobiology

Cognitive requirement - (must take 1)

PY/BY358 Animal Learning and Cognition
PY/BY357 Human Cognitive Evolution
PY/BY359 Perception
PY360 Learning and Memory
PY461 Judgment and Decision Making

Electives- selected from the above and following courses - (must take 3)

PY246 Educational Psychology	PY480 D.S. in Psychology
PY286 Organizational Behavior	PY481 D.S. in Social Psychology
PY310 Human Sexuality	PY482 D.S. in Physiological Psychology
PY311 Cyberpsychology	PY483 D.S. in Cognitive Psychology
PY315 Personal Relationships	PY491 Dir. Res./Health Psychology
PY317 The Psych of Psychoactive Drugs	PY492 Dir. Res./Psychophysiology
PY319 Current Readings in Animal Behavior	PY493 Dir. Res./Cognitive Psychology
PY321 Consumer Behavior	PY494 Dir. Res./Social Psychology
PY335 Personality	PY495 Dir. Res./Clinical Psychology
PY340 Behavioral Ecology & Sociobiology	PY900 Thesis/Dissertation in Psychology
PY361 Motivation and Emotion	
PY363 Judgement and Decision Making for the Biomedical Sciences	
PY370 Developmental Psychology	
PY372 Community Psychology	
PY411 Counseling Psychology	
PY412 Psychiatric Center Professional Experience	
PY453 Advanced Topics in Social Psychology	
PY459 Neuroscience and Society	
PY462 Abnormal Psychology	
PY463 Health Psychology	
PY464 Clinical Psychology	

3. Psychology Major Sample Curriculum

Freshman Year					
Fall			Spring		
course	Title	cr hrs	course	Title	cr hrs
PY151	Introduction to Psychology	3	PY255	Cognitive Psychology	3
	Natural Science elective	4	PY253	Social Psychology	3
UNIV190	Clarkson Seminar	3	MA181	Calculus	3
MA180	Intro. College Math	4		Natural Science elective	3
FY100	CCE first year seminar	1		Natural Science elective lab	2
		15			14
Sophomore Year					
Fall			Spring		
course	Title	cr hrs	course	Title	cr hrs
	Statistics (STAT 282 or 318)	3	PY	PY elective	3
PY	PY elective	6	PY	PY Cognitive elective	3
	Knowledge Area 1	3		Knowledge Area 2	3
	free elective	3		free elective	6
		15			15
Junior Year					
Fall			Spring		
course	Title	cr hrs	course	Title	cr hrs
PY456	Experimental Psychology	3		PY Physiological elective	3
PY 457	Experimental Psychology Lab	2		Free elective	3
	Knowledge Area 3	3		Knowledge Area 4	3
	free elective	8		free elective	6
		16			15
Senior Year					
Fall			Spring		
course	Title	cr hrs	course	Title	cr hrs
	PY directed research/internship	3		free electives	15
	knowledge area 5	3			
	free electives	9			
		15			15
total credits					120

1) The Professional & Professional Experience requirements are met by PY456 and the directed research/internship courses.

2) The Technology Serving Humanity requirement is met by PY456.

3) The Information Technology requirement is distributed throughout the Psychology Curriculum.

VII. REQUIREMENTS OF THE PSYCHOLOGY MINORS AND CONCENTRATIONS

1. Minor in Psychology (18 credits)

PY151 – (Introduction to Psychology) and any 5 PY courses numbered 200 or above (only one of which can be the directed research or internship).

2. Minor in Cognitive Neuroscience

Cognitive neuroscience is the study of the physiological and biochemical mechanisms underlying higher order human cognitive processes, such as attention, memory, perception, and emotion. The Cognitive Neuroscience minor will be of interest to students pursuing careers in the clinical health sciences (medicine, physical therapy, clinical psychology, neuropsychology) and those wishing to do basic and applied research on the central nervous system.

REQUIREMENTS

Required Basic Science Courses (29 cr)

PY151 Introduction to Psychology (3 cr)
BY140 Biology I: Inheritance, evolution and diversity (3 cr)
BY142 Biology I Laboratory (2 cr)
BY160 Biology II: Cellular and Molecular Biology (3 cr)
BY162 Biology II Laboratory (2 cr)
CM131 General Chemistry I (4 cr)¹
CM132 General Chemistry II (4 cr)¹
PH141 Physics for Life Sciences I (4 cr)²
PH142 Physics for Life Sciences II (4 cr)²

Required Cognitive Neuroscience Courses (9 credits)

BY/PY458 Cognitive Neuroscience (3 cr)
BY/PY454 Physiological Psychology³ (3 cr)
BY/PY460 Neurobiology (3 cr)

Elective Psychology Courses: 2 courses (6 credits) chosen from the following:

PY317 Psychology of Psychoactive Drugs (3 cr)
BY/PY358 Animal Learning and Cognition (3 cr)
PY/BY357 Human Cognitive Evolution (3 cr)
BY/PY359 Perception (3 cr)
PY360 Learning and Memory (3 cr)
PY462 Abnormal Psychology (3 cr)
PY463 Health Psychology (3 cr)

Elective Biology Courses: 2 courses (6 cr) chosen from the following:

BY360 Physiology (3 cr)
BY214 Genetics (3 cr)
BY430 Developmental Biology (3 cr)
BY350 Comparative Anatomy (3 cr)
BY471 Anatomy and Physiology I (3 cr)
BY472 Anatomy and Physiology II (3 cr)
BY480 Advanced Cell Biology

¹CM103/105 and CM104/106 will also satisfy the Chemistry requirement

²PH131 and PH132 will also satisfy the Physics requirement

³Biology majors taking the cognitive neuroscience minor cannot use PY/BY454 as one of their Biology elective courses.

3. Biology, Behavior, and Society minor

A minor in Biology, Behavior, and Society is available to students in all degree programs. To obtain a minor, students must complete 20 credits:

Required courses (11 cr):

HIST270 Introduction to Culture, Society & Biology (3 cr)
BY/PY340 Behavioral Ecology and Sociobiology (3 cr)
BY/PY357 Human Cognitive Evolution (3 cr)
SA&S300 Arts and Sciences Seminar (1 cr)
SA&S499 Biology, Behavior and Society Minor Portfolio (1 cr)

Electives (9 cr): Electives must be from outside your declared major, and include at least three credits from each of the two categories:

Category 1

ANTH220: Understanding the Americas (3 cr)
ANTH225: Global Perspectives on Sexuality (3 cr)
ANTH230 Introduction to Race and Ethnicity (3 cr)
ANTH270 Environment, Technology and Society (3 cr)
ANTH325: Sex and Commerce (3 cr)
HIST320: Medicine and Society in America (3 cr)
HIST326: Modern Sex (3 cr)
HIST327: History of Women in America (3 cr)
HIST328: History of Gender and Sex (3 cr)
HIST329: History of the American Family (3 cr)
HIST342: War and Gender (3 cr)
HIST350: History of Nazi Germany (3 cr)
HIST351: History of the Holocaust (3 cr)
SOC330: Health, Wealth, Inequality and the Environment (3 cr)
POL/SOC350: International Development and Social Change (3 cr)
SS220 Introduction to Gender (3 cr)

Category 2

BY/PY319 Current Readings in Animal Behavior (1 cr)
BY/PY358 Animal Learning and Cognition (3 cr)
BY460 Neurobiology (3 cr)
BY420 Evolution (3 cr)
EC384 Game Theory and Economic Strategy (3 cr)
HIST/PY459 Neuroscience and Society (3 cr)
OS286/PY286 Organizational Behavior 1 (3 cr)
PY253 Social Psychology (3 cr)
PY310 Human Sexuality (3 cr)
PY315 Personal Relationships (3 cr)
PY360 Learning and Memory (3 cr)
PY453 Advanced Topics in Social Psychology (3 cr)
PY461 Judgment and Decision Making (3 cr)
PY463 Health Psychology (3 cr)

4. Professional Concentration in Health Psychology

The Professional Concentration in Health Psychology is aimed at Psychology majors interested in careers in health science. The Professional Concentration in Health Psychology can be obtained by completing any 6 of the courses listed below (18-21 credits). Note that 3 of these courses must be used as undesignated free elective courses and cannot be used for the Psychology major.

- PY454 Physiological Psychology
- PY458 Cognitive Neuroscience
- PY463 Health Psychology
- PY310 Human Sexuality
- PY317 The Psychology of Psychoactive Drugs
- PY462 Abnormal Psychology
- PY253 Social Psychology
- PY361 Motivation and Emotion
- PY360 Learning and Memory
- PY412 Psychiatric Center Professional Experience

VIII. PSYCHOLOGY COURSE DESCRIPTIONS

PY151 Introduction to Psychology (IG) 3 credits

Emphasizes the scientific study of the human mind. Appropriate research methods and philosophical questions will be considered. Topics include the brain, memory, perception, development, personality, social behavior, emotion, motivation, psychological disorders, stress, and states of consciousness.

PY246 Educational Psychology 3 credits

Prerequisite: PY151 or consent of instructor

This course will examine the ways in which theories of child development and learning inform classroom teaching methods, assessment, behavioral interventions, and student motivation.

PY253 Social Psychology 3 credits

Prerequisite: PY151

Emphasis on the relative influences of society and other people on the individual. Topics include persuasion, attitude formation and change, group decision making, prejudice, social influence, altruism and aggression. Fundamental to the discussion of each topic is the scientific research that underlies it. A focus of the course is the means by which the individual can influence and be influenced by the organizations that play a major role in our lives

PY255 Cognitive Psychology 3 credits

Prerequisite: PY151

Investigates mental processes involved in perception, attention, memory, language, thinking and problem solving. The relationship between these processes and brain activity and artificial intelligence will also be discussed.

PY286 (OS286) Organizational Behavior I (IG) 3 credits

An introduction to the processes required to manage contemporary organizations with a focus on individual behaviors as they relate to the functions of planning, organizing, controlling, and leading. The most recent concepts of behavioral science in the practice of management are presented to assist the student in gaining understanding of the pervasiveness of the discipline in all types of organizations and processes. Topics include motivation, leadership, perceptions, personality theory, learning theory, personnel issues, stress management, organizational culture, and decision making.

PY310 Human Sexuality (UNIV: CGI/IG) 3 credits

The course objective is to provide an informed perspective on human sexual behavior. Topics include anatomy and physiology, contraception, sexually transmitted diseases, sexual development and identity, varieties of sexual behavior across cultures and species, disorders and difficulties of sexual expression, therapeutic issues on the treatment of

sexual disorders and the role of sex in interpersonal relationships. Offered spring semester. Requirement Designation: Social Science.

PY311 Cyberpsychology 3 credits

Prerequisite: PY 151

Cyberpsychology is the branch of psychology that examines human behavior in the context of interaction with modern technologies. The research in this field is primarily focused on the use of Internet, particularly social media sites, but other technologies, such as gaming, mobile device applications, artificial intelligence and virtual reality are also within the scope of this area of psychological research and practice. The goal of this course is to provide students with an in-depth understanding of the psychological factors associated with using technologies and interacting in on-line environment.

PY315 Personal Relationships (C1) 3 credits

Prerequisites: PY151 or Junior or Senior standing

According to some statistics humans spend as much as 60% of their lives in the company of others. This course will focus on research and theory in the psychology of personal relationships. Characteristics of romantic, marital, family and other social relationships will be considered. Topics will include attraction, relationship development and maintenance, communication, social support, and relationship conflict.

PY317 The Psychology of Psychoactive Drugs (UNIV: CGI/IG) 3 credits

The Psychology of Psychoactive Drugs will examine a number of medicinal and so-called recreational drugs that affect consciousness, including cocaine, morphine, LSD, marijuana, alcohol, nicotine and caffeine. The course will include a description of the drugs, their pharmacological action, and side-effects. Psychological, physiological, and pharmacological theories of tolerance and addiction, and addiction treatment programs will also be covered.

BY 319 Current Readings in Animal Behavior 1 credit

Prerequisites: BY222 or PY 151

The field of animal behavior is a rapidly advancing one, especially at the interface of neurobiology and cognition, and the interface of cognition and functional analysis of behavior (behavioral ecology and sociobiology). This one credit hour course is designed as a 'journal club' with a focus on the latest developments in theory and empirical research on animal behavior. The course is intended for any student who has a sincere interest in integrative animal behavior.

PY321 (MK321) Consumer Behavior 3 credits

Prerequisites: MK320

Extensive coverage of selected consumer behavior theories and models. Special emphasis given to the most recent research along with marketing mix applications. Topics include classic and operant conditioning, motivation and attribution theories and the elaboration likelihood model. Students are required to complete a term project.

PY335 Personality Psychology 3 credits

Prerequisites: PY151, Junior or Senior standing, or permission of the instructor.

Personality theories provide a framework with which to understand a person's development, motivation and behavior. This course examines traditional and contemporary approaches to personality, focusing on theoretical and empirical advances from the psychoanalytic, trait, behavioral, cognitive and phenomenological perspectives.

PY340 (BY340) Behavioral Ecology and Sociobiology (IG) 3 credits

Prerequisites: BY140 or PY151 or consent of instructor.

This course is concerned with the adaptive functions of animal behavior, emphasizing ecological and evolutionary perspectives. Topics covered include foraging behavior, sexual selection, social systems, parental care, and cooperation and conflict. One major focus will be on evaluating the arguments of proponents and critics of sociobiology on whether the fields are useful at explaining human behavior.

PY357 (BY 357) Human Cognitive Evolution 3 credits

Prerequisites: PY 151 or junior or senior standing

Evolutionary psychology is concerned with the adaptive problems and selective pressures our ancestors encountered in their environments, the psychological mechanisms that evolved to help them solve those problems, and the way those evolved mechanisms function in current environments. This way of thinking about the brain, mind, and behavior is changing how scientists approach old topics, and is opening up new ones. This course will focus on current developments and selected topics in evolutionary psychology (e.g., foraging, mate choice, parental investment, cooperation and culture) and explore the evolution of cognition from a broad comparative perspective.

PY358 (BY 358) Animal Learning and Cognition 3 credits

Prerequisites: BY140 or PY151 or consent of the instructor.

This course focuses upon how animals acquire, process, store and recall information about their environment and social partners. Topic that will be examined include how animals perceive and classify stimuli; how they learn and remember; how they orient and navigate; how they measure time, number, and amount; how they acquire abstract concepts; how they perceive social relationships; and how they communicate. A diversity of invertebrate and vertebrate organisms will be included (sea slugs to primates!), and there will be an emphasis on understanding taxon-specific specializations as well as general patterns across animals.

PY359 (BY359) Perception 3 credits

Prerequisites: PY151 or Junior or Senior standing

Perception deals with our conscious experience of the world, ourselves and each other. This course will examine how perceptions are measured (psychophysics); how visual, auditory, touch and pain sensory stimulation is actively organized into conscious perceptions; developmental aspects of perception; the role of cognitive factors, such as attention; and how altered conscious states (e.g., achieved through meditation, hallucinogenic drugs) affect perception. Fundamental principles of perception discussed

in this course will be used to explain how we experience the world, ourselves, and each other.

PY360 Learning and Memory 3 credits

Prerequisites: PY151 or Junior or Senior standing

The basic principles, major theories and practical applications of learning and memory processes will be explored in humans and animals. Topics will include how knowledge is acquired (learning), how it is represented, stored and accessed (memory), and how these learning and memory principals can be applied in education and in treating psychological disorders.

PY361 Motivation and Emotion 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course examines the forces of personality, environment, and culture that lead people to want what they want, and do what they do. Motivation will be explored in the contexts of education, work, therapy, sports, and relationships. Topics include: self-efficacy, self-regulation, learned helplessness, intrinsic and extrinsic motivation, achievement motivation, goal-setting, implementation intentions, self-determination, and emotion. Recent developments in the field of motivation will be applied to the practice of motivating others.

PY363 Judgement and Decision Making for the Biomedical Sciences 3 credits

Prerequisites: Student enrolled in Trudeau semester experience

Decision making is using information (and in some cases emotion) to guide behavior among multiple possible courses of action—for example, which foods to choose, which stocks to invest in, who to select for a romantic partner, or which products to buy. These choices determine our success in meeting the challenges of life. This course will cover a wide variety of topics regarding how individuals and groups form judgments and make decisions, by drawing on findings from psychology, economics, and biology. We will investigate the various techniques used to study and assess human judgment and decision making, explore how people reason under risk and uncertainty and apply the research addressed in class to real-world problems and issues. Particular focus will be given to judgment and decision-making in applied health contexts that are of high relevance for students with career goals in the biomedical sciences.

PY370 Developmental Psychology 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course will examine normal development from infancy through adolescence. It will cover theories of development as well as current issues and research. Consideration will be given to interaction of physical, cognitive, and social emotional domains. Example topics include: of self and others, the development of language, sex roles, moral beliefs, friendship, and a personal identity.

PY372 Community Psychology 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course is designed to introduce students to the field of Community Psychology, which aims to improve community mental health through research and social intervention programs such as prevention, citizen participation, environmental change, and influence of public policy. This course will introduce the background and content of community mental health and community psychology, present the key concepts involved, and engage students in practical applications of the methods used by community psychologists.

PY400 Internship - Professional Experience (C2) 3 credits

Prerequisites: Junior/Senior standing or consent of instructor

This course entails completing a professional experience (90 - 120 hours) through volunteer or work activities associated with psychology and writing an APA style paper that integrates the professional experience with relevant psychological literature. Examples of professional experiences include, but are not limited to, St. Lawrence Psychiatric Facility, Reach Out Crisis Hotline, Renewal House, Canton-Potsdam Hospital Chemical Dependency Unit, working in Human Resources or marketing/advertising departments, Hospice, patient advocacy, counseling, or mental health diagnoses. Note that the professional experience must be approved BEFORE the student begins the experience; please contact the Psychology Front Office for details.

PY401 Internship - Clinical/Counseling Psychology (C2) 3 credits

Prerequisites: consent of instructor

This course entails completing a professional experience (90 - 120 hours) through volunteer or work activities associated in clinical/counseling psychology and writing an APA style paper that integrates the professional experience with relevant psychological literature. Note that the professional experience must be approved BEFORE the student begins the experience; please contact the Psychology Front Office for details. This class is taught in an individual study format and can replace, if needed, the PY400 Internship - Professional Experience class.

PY402 Internship - Personnel Relations (C2) 3 credits

Prerequisites: consent of instructor

This course entails completing a professional experience (90 - 120 hours) through volunteer or work activities associated in relevant organizations and writing an APA style paper that integrates the professional experience with relevant psychological literature. Note that the professional experience must be approved BEFORE the student begins the experience; please contact the Psychology Front Office for details. This class is taught in an individual study format and can replace, if needed, the PY400 Internship - Professional Experience class.

PY403 Internship in Psychology in Health Care Environments (C2) 3 credits

Prerequisites: consent of instructor

This course entails completing a professional experience (90 - 120 hours) through volunteer or work activities associated in health care environments and writing an APA

style paper that integrates the professional experience with relevant psychological literature. Note that the professional experience must be approved BEFORE the student begins the experience; please contact the Psychology Front Office for details. This class is taught in an individual study format and can replace, if needed, the PY400 Internship - Professional Experience class.

PY411 Counseling Psychology: Theory and Practice. 3 credits

Prerequisites: Psychology major with junior or senior standing, or permission of the instructor.

This course builds a foundation of clinical knowledge and skills for those who may pursue work in counseling or psychotherapy. It surveys the most widely accepted theories of counseling and provides experiential opportunities to learn and practice facilitative communication skills. Students explore basic concepts for integrating diagnosis, evaluative testing, treatment planning, and appropriate referral into the counseling process. The various types of counseling professions and the ethical issues surrounding counseling are also discussed.

PY412 Psychiatric Center Professional Experience 6 credits

Students will spend one full day per week working with and observing Clinical Psychologists at the St. Lawrence Psychiatric Center in Ogdensburg, NY. The experience may include rounds at the Sex Offenders Treatment Program, Child and Youth Program, and the Adult Services Program. Activities include observing group therapy, developing a lesson plan for and delivering a therapy session under the supervision of a staff Psychologist, and observing treatment team meetings. This course is only open to Psychology majors. Prerequisites: PY151 and permission of the instructor. Acceptance into the course will be based on GPA and a short essay describing how this course will advance his/her personal and professional goals.

PY 453 Advanced Topics in Social Psychology, (C2) 3 credits

Prerequisites: PY151, PY253

In this course students will receive an intensive treatment of several classic and cutting-edge topics in social psychology, including social motivation, self-esteem, social identity and intergroup relations, the psychology of meaning, embodied social cognition, and social neuroscience. Students will develop their understanding and communication of social psychological concepts, theories, and research by engaging in class debate and discussion, giving oral presentations, and writing scientific literature reviews.

PY454 (BY454) Physiological Psychology 3 credits

Prerequisites: PY151 or Junior or Senior standing

A comprehensive investigation of the physiological foundation of behavior. Topics include: perception, motivation, emotion, states of consciousness, learning, memory and mental illness.

PY456 Experimental Psychology (Tech) 3 credits

Prerequisites: PY151 and either STAT282, STAT383, or STAT318 and Psychology Major with junior or senior standing.

This course involves research design, hypothesis testing, measurement and analysis, and includes the application and interpretation of statistics. The research methodologies covered will include experimental and quasi-experimental designs.

PY457 Experimental Psychology Laboratory (C2) 2 credits

Students will work in teams to design and conduct an experiment, analyze the results and write up their findings in the American Psychological Association format. PY456 is a corequisite to this course.

PY458 Cognitive Neuroscience (UNIV: STS/IG) 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course introduces a sampling of the theories and research concerning how various mental processes are accomplished with the brain. Emphasis will be placed on developing an understanding of both the physiological bases of the techniques and the issues involved in relating measures of brain activity to cognitive functioning. Students will be exposed to current topics of study in a number of areas of cognition: perception, language, memory, among others. In this course we will study a number of different techniques for studying the brain including electrophysiological recording techniques, functional imaging techniques, and methods that involve brain lesions and disrupting neural activity.

PY459 (HIST 459) Neuroscience and Society (STS,C1) 3 credits The word 'neuroscience' is of recent origin. Yet we can trace neuroscientific ideas back to Rene Descartes. Since Decartes, social understanding of madness, the relationship between mind and brain, and the nature of sensation and perception has changed frequently. Beginning in the Age of Mechanical Man, and ending in the Age of Prozac, this course examines how society has influenced neuroscientific thought and how, in turn, neuroscience has influenced society.

PY460 (BY 460) Neurobiology 3 credits

Neurons are electrically excitable cells that initiate and control many complex functions such as sensory perception, locomotion, memory, and learning. This course introduces the study of neuronal mechanisms at the cellular and molecular level. Topics include: membrane biophysics, ion channels, electrical signaling, synaptic transmission, glia, sensory transduction, neuromodulation, and neuronal plasticity.

PY461 Judgment and Decision Making 3 credits

Prerequisites: PY151

Decision making is using information (and in some cases, emotion) to guide behavior among multiple possible courses of action - which foods to choose, who to select for a romantic partner, or which products to buy. These choices determine our success in meeting the challenges of life. This course will cover a wide variety of topics regarding how people form judgments and make decisions by drawing on findings from psychology, economics, and biology. We will investigate the various techniques used to study and

assess human judgment and decision making, explore how people reason under risk and uncertainty and apply the research addressed in class to real-world problems and issues.

PY462 Abnormal Psychology 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course surveys the major syndromes of psychopathology, including schizophrenia, depression and manic-depression, anxiety disorders, and psychopathic personality. Reviews known causes, symptomatology, and both pharmacological and psychological modes of intervention.

PY463 Health Psychology (C1) 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course will provide an introduction to the field of health psychology, which is concerned with the role of psychological and social factors in health and illness. The course will address three general subject areas: 1) attitudes, behavior, and lifestyle factors affecting disease prevention and development, 2) stress and the related personality and social processes associated with disease development and progression, and 3) the psychological and social consequences of physical illness.

PY 464 Clinical Psychology 3 credits

Prerequisites: PY151 or Junior or Senior standing

This course is designed to introduce students to the theoretical, empirical, and ethical foundations of clinical psychology. We will focus on the major roles of clinical psychologists, particularly psychotherapy, assessment, and issues in education and training. Students will also be asked to engage in self-reflection throughout the course, as the ongoing development of self-awareness and self-knowledge are essential to effective and ethical practice. Contemporary issues and controversies that are currently shaping the field of clinical psychology will also be addressed. Prior enrollment in PY462 (Abnormal Psychology) is recommended.

PY480 Directed Study in Psychology 1 to 6 credits

Prerequisites: consent of instructor.

This is a directed reading course that will allow the student the opportunity to pursue special interests in the general psychology.

PY481 Directed Study in Social Psychology 1 to 6 credits

Prerequisites: consent of instructor.

This is a directed reading course that will allow the student the opportunity to pursue special interests in social psychology.

PY482 Directed Study in Physiological Psychology 1 to 6 credits

Prerequisites: consent of instructor.

This is a directed reading course that will allow the student the opportunity to pursue special interests in physiological psychology.

PY483 Directed Study in Cognitive Psychology 1 to 6 credits

Prerequisites: consent of instructor.

This is a directed reading course that will allow the student the opportunity to pursue special interests in cognitive psychology.

PY491 Directed Research in Health Psychology 1 to 6 credits.

Prerequisites: consent of instructor.

The student works one-on-one with a faculty member on a health psychology research project. The student will learn about the major theories related to the research topic and gain first-hand experience with research methodology issues, data collection, and analysis. Does not count towards the directed research requirement for the psychology major.

PY492 Directed Research in Psychophysiology 1 to 6 credits

Prerequisites: consent of instructor.

The student works one-on-one with a faculty member on a psychophysiological research project. The student will learn about the major theories related to the research topic, and gain first-hand experience with research methodology issues, data collection, and analysis. Does not count towards the directed research requirement for the psychology major.

PY493 Directed Research in Cognitive Psychology 1 to 6 credits

Prerequisites: consent of instructor.

The student works on-on-one with a faculty member on a cognitive psychology research project. The Student will learn about the major theories related to the research topic, and gain first-hand experience with research methodology issues, data collection, and analysis. Does not count towards the directed research requirement for the psychology major.

PY494 Directed Research in Social Psychology 1 to 6 credits

Prerequisites: consent of instructor.

The student works on-on-one with a faculty member on a social psychology research project. The Student will learn about the major theories related to the research topic, and gain first-hand experience with research methodology issues, data collection, and analysis. Does not count towards the directed research requirement for the psychology major.

PY495 Directed Research in Clinical Psychology (C1) 1 to 6 credits.

Prerequisites: consent of instructor.

The student works on-on-one with a faculty member on a clinical psychology research project. The Student will learn about the major theories related to the research topic, and gain first-hand experience with research methodology issues, data collection, and analysis. Does not count towards the directed research requirement for the psychology major.

PY496 Directed Research in Psychology (C1) 1 to 6 credits.

Prerequisites: consent of instructor.

The student works on-on-one with a faculty member on a research project of mutual interest. The Student will learn about the major theories related to the research topic, and gain first-hand experience with research methodology issues, data collection, and analysis.

The student will write an APA style research paper. This course can be used to satisfy the directed research requirement for the psychology major.

PY498 Senior Thesis (C1) 1 to 10 credits

Prerequisites: Senior psychology majors and consent of department faculty.

Research under the direction of a faculty sponsor, who assists the student in the choice of a problem and in the planning and execution of the research.

PY499 Senior Thesis (C1) 1 to 10 credits

Prerequisites: PY498.

Continuation of the research from PY498 leading to a written thesis due at the end of the course. Can be used to satisfy the directed research requirement for the psychology major.

