PSYCHOLOGY

For college-level requirements in undergraduate curricula leading to the degrees of bachelor of arts and bachelor of science, see Liberal Arts and Sciences, Curriculum.

An undergraduate major in psychology provides a liberal arts and science education, which also can serve as preparation for graduate study in psychology, law, or the health professions. The undergraduate major in psychology enables graduates to understand and apply the scientific principles, facts, and basic methods of psychology to their personal and professional activities. Students with a bachelor's degree (B.A./B.S.) in psychology may qualify for a variety of positions including those in social sciences, mental health, corrections, rehabilitation, developmental disability centers, and business (management, insurance, opinion polls). Professional work as a psychologist in academic, business, clinical, government, and school settings requires graduate degrees. Depending on professional goals, a minor in another discipline may be desirable.

Following the recommendations of the American Psychological Association, the undergraduate curriculum in psychology is designed to allow each student to:

1. Develop a detailed knowledge of psychology

2. Develop an understanding of scientific inquiry and demonstrate critical thinking

3. Understand the role of ethics and diversity in human behavior

 Be able to communicate effectively in the discourse of psychology
Develop skills supporting employment or graduate/professional education

COMMUNICATION PROFICIENCY REQUIREMENT

According to the university-wide Communication Proficiency Grade Requirement, students must demonstrate their communication proficiency by earning a grade of C or better in ENGL 250.

| ENGL 150 | Critical Thinking and Communication | 3 |
|--------------|--|---|
| ENGL 250 | Written, Oral, Visual, and Electronic Composition | 3 |
| or ENGL 250H | Written, Oral, Visual, and Electronic Composition: | |
| | Honors | |

The Department requires a C- or better in one of the following:

| PSYCH 302 Research Methods in Psychology | | 3 |
|--|-----------------------------|---|
| ENGL 302 | Business Communication | 3 |
| ENGL 309 | Proposal and Report Writing | 3 |
| ENGL 314 | Technical Communication | 3 |

The major must include the following psychology courses each with a minimum grade of C- and an overall average of C or better.

| PSYCH 111 | Orientation to Psychology (or Psych 112 Learning | 1 |
|-----------|--|---|
| | Community) | |
| PSYCH 101 | Introduction to Psychology * | 3 |
| PSYCH 211 | Career Opportunities in Psychology | 1 |
| PSYCH 301 | Research Design and Methodology * | 3 |
| PSYCH 440 | Psychological Measurement I * | 3 |

The major also must include at least one course from four of the following six areas:

| PSYCH 230 | Developmental Psychology | |
|------------------|---|---|
| PSYCH 335 | Abnormal Psychology of Children and Adolescents | |
| Area B | | |
| PSYCH 280 | Social Psychology | |
| PSYCH 380 | Social Cognition | |
| Area C | | |
| PSYCH 310 | Brain and Behavior | |
| PSYCH 315 | Drugs and Behavior | |
| Area D | | |
| PSYCH 312 | Sensation and Perception | |
| PSYCH 313 | Learning and Memory | |
| PSYCH 316 | Cognitive Psychology | |
| Area E | | |
| PSYCH 360 | Personality Psychology | |
| PSYCH 460 | Abnormal Psychology | |
| Area F | | |
| PSYCH 250 | Psychology of the Workplace | |
| PSYCH 350 | Human Factors in Technology | |
| Three additional | 3-credit courses in psychology | 9 |
| | | |

Three additional 3-credit courses in psychology must be taken. Area courses may be used to meet this requirement, but variable credit courses (PSYCH 291, PSYCH 470, PSYCH 490, PSYCH 491, and PSYCH 492) may not.

In accordance with college requirements, a C or better average is required in the courses used to satisfy the major.

Departmental requirements for the B.A. and B.S. include the following supporting courses:

| | 6 credits in Philo | sophy including | 6 | |
|----------------------|--------------------|--------------------------------------|---|--|
| | PHIL 201 | Introduction to Philosophy (not 207) | 3 | |
| Two of the following | | | | |
| | BIOL 101 | Introductory Biology (or higher) | | |
| | BIOL 155 | Human Biology (or 255 or 256) | | |

2 Psychology

| BIOL 313 | Principles of Genetics | |
|--|--|-----|
| CHEM 160 | Chemistry in Modern Society (or higher) | |
| PHYS 101 | Physics for the Nonscientist (or higher) | |
| STAT 101 | Principles of Statistics * | 3-4 |
| or STAT 104 | Introduction to Statistics | |
| 3 credits in Mathematics from selected course list** | | |

* minimum grade of C-

** Popular choices include Math 104, Math 140, Math 150, Math 165, and Stat 301. See general education mathematics list for alternative options. Neither Math 105 nor Math 106 may be used to satisfy this requirement.

Students pursuing a B.S. degree also must complete PSYCH 302 Research Methods in Psychology with a minimum grade of C- and a minimum of 10 additional credits from courses listed in the LAS Gen Ed Natural Sciences and Mathematical Disciplines Area as follows: six additional credits in natural sciences, one additional credit in a laboratory course, and three additional credits in mathematics. It should be noted that either Math 104 or Math 150 may be counted toward the B.S. degree requirement, but not both.

Students electing a B.A. degree also must complete an ISU approved minor.

The department offers a minor in psychology. The minor requires completing 18 credits in psychology, including PSYCH 101 Introduction to Psychology and PSYCH 301 Research Design and Methodology, each with a minimum grade of C-. At least 9 of the 18 credits must be in 300 level courses (or above), but no more than three credits total may be from PSYCH 291 Introductory Research Experience, PSYCH 490 Independent Study, PSYCH 491 Research Practicum, and PSYCH 492 Fieldwork Practicum. The minor must include at least 9 credits that are not used to meet any other department, college, or university requirement. In addition to an overall C average or better in courses used to satisfy the minor, a Cor better is required in each course. Contact the psychology advising office for more information.

Psychology, B.A.

Freshman

| Fall | Credits Spring | Credits |
|---------------------------------------|-----------------------------------|---------|
| ENGL 150 | 3 Psychology Choice [*] | 3 |
| PSYCH 101 ³ | 3 Social Science Choice * | 3 |
| Required Natural Science [*] | 3 Required Natural Science * | 3 |
| Required Math [*] | 3 Arts & Humanities Choice * | 3 |
| Social Science Choice [*] | 3 Electives | 3 |
| PSYCH 111 | 1 LIB 160 | 1 |
| | 16 | 16 |

Fall **Credits Spring** Credits ENGL 250² 3 Psychology Choice 3 Psychology Choice 3 Psychology Choice 3 Arts & Humanities Choice 3 STAT 101³ 4 **PHIL 201** 3 Minor 3 Required Natural Science* 3 PSYCH 211 1 15 14 Junior Fall **Credits Spring** Credits PSYCH 301³ 3 PSYCH 302 or one of ENGL 3 302, ENGL 309, ENGL 314¹ Psychology Choice 3 Minor 3 Philosophy Choice* 3 Foreign Language/Elective 3-4 3-4 Elective Foreign Language/Elective 6 Minor 3 15-16 15-16 Senior Fall **Credits Spring** Credits PSYCH 440³ **3 Psychology Choice** 3 Psychology Choice^{*} 3 Minor 3 Minor **3** Electives 10 Electives 6 15 16

Sophomore

Students in all ISU majors must complete a three-credit course in U.S. diversity and a three-credit course in international perspectives. Check (http://www.registrar.iastate.edu/courses/div-ip-guide.html) for a list of approved courses. Discuss with your adviser how the two courses that you select can be applied to your graduation plan. LAS majors require a minimum of 120 credits, **including a minimum**

of 45 credits at the 300/400 level. You must also complete the LAS foreign language requirement.

- Meets English Proficiency Requirement: C- minimum.
- ² The university-wide Communication Proficiency Grade Requirement (http://catalog.iastate.edu/previouscatalogs/2020-2021/ collegescurricula/) requires a grade of C or better in ENGL 250.
- ³ Psych Requirement: C- minimum

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* Choose from list of selected courses available from an adviser.

Psychology, B.S

| Freshman | | |
|---------------------------------------|---|---------|
| Fall | Credits Spring | Credits |
| ENGL 150 | 3 Psychology Choice [*] | 3 |
| PSYCH 111 | 1 Social Sciences Choice * | 3 |
| PSYCH 101 ³ | 3 Required Natural Science [*] | 3 |
| Required Math [*] | 3 Arts & Humanities Choice * | 3 |
| Social Sciences Choice [*] | 3 Electives | 3 |
| Required Natural Science [*] | 3 LIB 160 | 1 |
| | 16 | 16 |
| Sophomore | | |
| Fall | Credits Spring | Credits |
| ENGL 250 ² | 3 Psychology Choice [*] | 3 |
| Psychology Choice [*] | 3 Psychology Choice [*] | 3 |
| Arts & Humanities ${\sf Choice}^*$ | 3 STAT 101 ³ | 4 |
| PHIL 201 | 3 Electives | 3 |
| Required Natural Science * | 3 PSYCH 211 | 1 |
| Required Natural Science | 1-2 | |
| Laboratory [*] | | |
| | 16-17 | 14 |
| Junior | | |
| Fall | Credits Spring | Credits |
| PSYCH 301 ³ | 3 PSYCH 302 ¹ | 3 |
| Psychology Choice [*] | 3 Required Math [*] | 3 |
| Foreign Language/Elective | 3-4 Required Natural Science [*] | 3 |
| Philosophy Choice [*] | 3 Foreign Language/Elective | 3-4 |
| Electives | 3 Electives [*] | 3 |
| | 15-16 | 15-16 |
| Senior | | |
| Fall | Credits Spring | Credits |
| PSYCH 440 ³ | 3 Psychology Choice [*] | 3 |
| Psychology Choice [*] | 3 Electives | 13 |
| Electives | 8 | |
| | 14 | 16 |
| | | |

Students in all ISU majors must complete a three-credit course in U.S. diversity and a three-credit course in international perspectives. Check (http://www.registrar.iastate.edu/courses/div-ip-guide.html) for a list of approved courses. Discuss with your adviser how the two courses that you select can be applied to your graduation plan.

LAS majors require a minimum of 120 credits, **including a minimum** of 45 credits at the 300/400 level. You must also complete the LAS foreign language requirement.

Meets English Proficiency Requirement: C- minimum.

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- ² The university-wide Communication Proficiency Grade Requirement (http://catalog.iastate.edu/previouscatalogs/2020-2021/ collegescurricula/) requires a grade of C or better in ENGL 250.
- ³ Psych Requirement: C- minimum
- * Choose from list of selected courses available from an adviser.

Graduate Study

The department offers work for the degree of doctor of philosophy in psychology. A master of science may be earned as part of that degree.

The department offers a doctoral specialization in counseling psychology (APA accredited) and doctoral areas of concentration in cognitive psychology and social psychology.

A basic goal of graduate study in the Department of Psychology is to provide all students with a broad base of knowledge in psychological science, as well as exposure to the content and methodological skills necessary for effective performance in teaching, research and professional practice. Accordingly, graduates have an extensive knowledge of psychological principles and the conceptual and quantitative skills to conduct psychological research and to communicate the results to the scientific community, students in the classroom, and the general public. Graduates in counseling psychology are skilled in delivering services to diverse clientele in a variety of settings.

The department also participates in the interdepartmental programs in human computer interaction (http://www.vrac.iastate.edu/hci/), neuroscience (http://www.neuroscience.iastate.edu/) (http:// www.neuroscience.iastate.edu/) and in the interdepartmental minor in gerontology (http://www.gerontology.iastate.edu/programs/).

A formal class and a supervised practicum in the teaching of psychology is recommended for all doctoral students whose future plans may include teaching at the college level. A 12-month internship in a training site or agency approved by the faculty is required of all doctoral students in counseling psychology.

Courses primarily for undergraduates:

PSYCH 101: Introduction to Psychology

(3-0) Cr. 3. F.S.SS.

Fundamental psychological concepts derived from the application of the scientific method to the study of behavior and mental processes. Applications of psychology.

PSYCH 102: Laboratory in Introductory Psychology

(0-2) Cr. 1. F.S. Prereq: Credit or enrollment in PSYCH 101 Laboratory to accompany 101.

PSYCH 111: Orientation to Psychology

Cr. 1. F.S.

Program requirements and degree/career options. Required of psychology majors. Offered on a satisfactory-fail basis only.

PSYCH 112: Psychology Learning Community Seminar

(1-0) Cr. 1. Repeatable, maximum of 2 credits. F.S.

Prereq: Participation in Freshman Learning Community

Topics include orientation to academic program requirements, career awareness, strategies for successful transition to college, connections with other disciplines, and applying psychology via service learning opportunities. Offered on a satisfactory-fail basis only.

PSYCH 131: Academic Learning Skills

(1-0) Cr. 1. F.S.

Evidence-based approach to learning and applying academic skills such as time management, note-taking, reading, test preparation, goal setting and motivation, and well-being. Hybrid course structured in a team-based learning format.

PSYCH 211: Career Opportunities in Psychology

Cr. 1. F.S.

Prereq: PSYCH 111

Introduction to career options for psychology majors. Development of foundational career preparation topics like resume writing, interviewing, and other career-related topics. Thorough introduction to the sub-fields of psychology. Guidance on applying to graduate school or seeking a job with a bachelor's degree. Offered on a satisfactory-fail basis only.

PSYCH 230: Developmental Psychology

(3-0) Cr. 3. F.S.SS.

Life-span development of physical traits, cognition, intelligence, language, social and emotional behavior, personality, and adjustment.

PSYCH 250: Psychology of the Workplace

(3-0) Cr. 3.

Survey of theories and research methods of psychology applied to the workplace. Consideration of employee selection, training, performance evaluation, leadership, work groups, employee motivation, job attitudes and behaviors, organizational culture, organizational development, human factors, and job design from the scientist-practitioner approach.

PSYCH 280: Social Psychology

(3-0) Cr. 3. F.S.SS.

Individual human behavior in social contexts. Emphasis on social judgments and decisions, attitudes, perceptions of others, social influence, aggression, stereotypes, and helping.

PSYCH 291: Introductory Research Experience

Cr. 1-4. Repeatable, maximum of 4 credits. F.S. *Prereq: PSYCH 101, sophomore classification, and permission of intructor.* Beginning level supervised research experience in a faculty laboratory. Offered on a satisfactory-fail basis only.

PSYCH 301: Research Design and Methodology

(3-0) Cr. 3. F.S.SS.

Prereq: STAT 101; 1 course in psychology

Overview of the principal research techniques used in psychology with an emphasis on the statistical analysis of psychological data.

PSYCH 302: Research Methods in Psychology

(2-2) Cr. 3. F.S.

Prereq: PSYCH 301, ENGL 250

Discussion of and experience in designing research studies, collecting and analyzing data, and preparing research reports in psychology.

PSYCH 310: Brain and Behavior

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101

Survey of basic concepts in the neurosciences with emphasis on brain mechanisms mediating sensory processes, arousal, motivation, learning, and abnormal behavior.

PSYCH 312: Sensation and Perception

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101

Survey of the physiology and psychology of human sensory systems including vision, audition, smell, taste, the skin senses, and the vestibular senses.

PSYCH 313: Learning and Memory

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101

Survey of fundamental concepts and theories related to learning and memory derived from human and animal research.

PSYCH 314: Motivation

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101

Theory and research on motivation at biological, environmental, and psychological levels. Topics include emotion, eating, sex, music, addictions, incentives, goal performance, personality, coping, selfdetermination and purpose.

PSYCH 315: Drugs and Behavior

(3-0) Cr. 3. F.S. Prereg: PSYCH 101

Biologically based examination of the effects of drugs on behavior and social interactions, including recreational drugs and drugs used in the treatment of psychiatric and neurological disorders.

PSYCH 316: Cognitive Psychology

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101

Overview of human cognition, including sensation and perception, attention, memory, language, and judgment and decision making.

PSYCH 320: Sleep and Dreams

(3-0) Cr. 3. Alt. S., offered irregularly. Prereq: PSYCH 101

Scientific study of sleep and dreams including basic biological and psychological aspects of sleep-wake cycles, the nature and function of dreams, and the role of sleep in human behavior, performance, and wellbeing. Sleep problems and their social consequences.

PSYCH 333: Educational Psychology

(Cross-listed with EDUC). (3-0) Cr. 3. F.S.

Prereq: PSYCH 230 or HD FS 102, application to the teacher education program or major in psychology

Psychological theories relevant to student development, learning, and motivation. Review of assessment principles and practices. Implications of theory for teaching children and for assessing learning in K-12 educational settings, with an emphasis on grades 5 – 12.

PSYCH 335: Abnormal Psychology of Children and Adolescents

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101; PSYCH 230 or HDFS 102

Psychopathology of children and adolescents, including childhood depression and anxiety disorders. Consideration of multiple probable causes and corresponding therapies.

PSYCH 346: Psychology of Women

(Cross-listed with WGS). (3-0) Cr. 3. S.

Prereq: 2 courses in psychology including PSYCH 101 Survey of theory and research related to major biological, interpersonal, and cultural issues affecting girls' and women's psychological development and behavior.

Meets U.S. Diversity Requirement

PSYCH 347: U.S. Latino/a Psychology

(Cross-listed with US LS). (3-0) Cr. 3. S. *Prereq: Two courses in Psychology including PSYCH 101* Historical, political, and social contexts of psychological and mental health constructs in terms of their validity and utility for use with Latino/a people in the U.S. Unique aspects of psychological functioning particular to Latino/a people in the U.S. Meets U.S. Diversity Requirement

PSYCH 348: Psychology of Religion

(Cross-listed with RELIG). (3-0) Cr. 3.

Prereq: Nine credits in psychology

Survey of psychological theory and research investigating religious and spiritual attitudes, beliefs and practices.

PSYCH 350: Human Factors in Technology

(3-0) Cr. 3. F.

Prereq: PSYCH 101; junior classification

Understanding human behavior and cognition in the context of modern technologies. Focus on emergent interactive technologies, human computer interaction, user centered design, usability analysis, and usability testing.

PSYCH 360: Personality Psychology

(3-0) Cr. 3. F.S.SS.

Prereq: PSYCH 101

Historical and contemporary theory and research on development and expression of personality with a focus on normal functioning.

PSYCH 380: Social Cognition

(3-0) Cr. 3.

Prereq: PSYCH 101 or PSYCH 280

How people understand themselves and others, including attitude formation and change, attribution, impression formation, social categories and schemas, the self, stereotypes, and prejudice.

PSYCH 381: Social Psychology of Small Group Behavior

(Cross-listed with SOC). (3-0) Cr. 3. S. *Prereq: SOC 305 or PSYCH 280* A survey of small group theory and research from an interdisciplinary,

social psychological perspective.

PSYCH 383: Psychology and Law

(3-0) Cr. 3. F.S.

Prereq: PSYCH 101 or PSYCH 280

Survey of topics in the interface between psychology and the legal system including but not limited to Miranda warning, confessions, police interrogation, lie detection, juries, eyewitness identification, false memories, and the death penalty.

PSYCH 386: Media Psychology

Cr. 3. F.S.SS.

Prereq: PSYCH 101 or PSYCH 230 or PSYCH 280

Theories and research on the psychological mechanisms (e.g., attitudes, perceptions, emotions, arousal) by which media influence children and adults. Topics include media violence, educational media, advertising, music, video games, media literacy, and ratings.

PSYCH 405: History of Psychology

(Dual-listed with PSYCH 505). (3-0) Cr. 3. S.

Prereq: 4 courses in psychology

Origins of psychology in philosophy, physiology, medicine and religion. Development as a scientific discipline during the nineteenth and twentieth centuries. Historical overview of clinical practice and theory.

PSYCH 410: Behavioral Neurology

(Dual-listed with PSYCH 510). (3-0) Cr. 3. F.

Prereq: PSYCH 101; PSYCH 310 or equivalent.

Examination of the neuroanatomical foundation of cognition, affect, and action from a neurological perspective. Focus on basic and applied research with neurological patients.

PSYCH 411: Evolutionary Psychology

(3-0) Cr. 3. S.

Prereq: Junior classification, three courses in psychology; one course in biology

Examination of the application of the principles of evolutionary biology to the understanding of human behavior. Evolutionary perspectives on brain development, cognition, language, mating behavior, sex differences, altruism, artistic behavior, and criminal behavior are explored. Arguments by those critical of the evolutionary approach to psychology are also examined.

PSYCH 413: Psychology of Language

(Cross-listed with LING). (3-0) Cr. 3.

Prereq: PSYCH 101

Introduction to psycholinguistics. Topics may include origin of language, speech perception, language comprehension, reading, bilingualism, brain bases of language, and computational modeling of language processes.

PSYCH 422: Counseling Theories and Techniques

(3-0) Cr. 3. F.

Prereq: 3 courses in psychology

Overview of the major counseling theories and techniques, with emphasis on the key concepts of each theory, the role of the counselor, therapeutic goals, and the main techniques derived from each theory.

PSYCH 422L: Laboratory in Counseling Theory and Techniques (0-2) Cr. 1. F.

Prereq: Three classes in psychology and credit or enrollment in PSYCH 422. Learn basic counseling skills such as active listening, reflecting feelings, empathy, confrontation, immediacy and self-disclosure. Supervised practice using basic counseling skills.

PSYCH 440: Psychological Measurement I

(2-2) Cr. 3. F.S.SS.

Prereq: PSYCH 301 and 9 credits in psychology, STAT 101 Principles of psychological measurement, including concepts of reliability and validity; interpretation of scores; factors influencing performance; construction and use of measures of ability, achievement, and personality.

PSYCH 450: Industrial Psychology

(3-0) Cr. 3. F.S.

Prereq: 2 courses in psychology including PSYCH 101, STAT 101 Theory, content and methods of industrial psychology related to the effective operation of organizations. Application of psychology principles to topics including different approaches used to select employees, how to conduct performance appraisals, and how to train and keep employees safe. Work attitudes and behaviors of employees as well as relevant legal issues. Statistics including regression and correlation are used.

PSYCH 460: Abnormal Psychology

(3-0) Cr. 3. F.S.SS.

Prereq: 3 courses in psychology including PSYCH 101

Description of major forms of psychopathology including anxiety, mood disorders, personality disorders, substance abuse, and schizophrenia. Coverage of research examining causes, development, and clinical issues concerning psychopathology.

PSYCH 470: Seminar in Psychology

(1-0) Cr. 1-3. Repeatable.

Prereq: 12 credits in psychology

Current topics in psychological research and practice in the following areas.

PSYCH 470A: Seminar in Psychology: Counseling

(1-0) Cr. 1-3. Repeatable. *Prereq: 12 credits in psychology*

PSYCH 470B: Seminar in Psychology: Experimental (1-0) Cr. 1-3. Repeatable. Prereq: 12 credits in psychology

PSYCH 470C: Seminar in Psychology: Individual Differences (1-0) Cr. 1-3. Repeatable. Prereq: 12 credits in psychology

PSYCH 470D: Seminar in Psychology: Social

(1-0) Cr. 1-3. Repeatable. *Prereq: 12 credits in psychology*

PSYCH 484: Psychology of Close Relationships

(3-0) Cr. 3.

Prereq: 9 credits in psychology including PSYCH 280

Theories and research concerning the functions, development, and deterioration of close relationships. Influence of psychological processes on friendship, romantic, marital, and family relationships. Topics include mate selection, interdependence, trust and commitment, power and dominance in relationships, sexuality, divorce, gender roles, and family interaction.

PSYCH 485: Health Psychology

(3-0) Cr. 3. F.

Prereq: Junior classification, 6 credits in psychology

Application of psychological theory and research methods to issues in physical health. Psychological factors in illness prevention, health maintenance, treatment of illness, recovery from injury and illness, and adjustment to chronic illness.

PSYCH 487: Human Aggression

(3-0) Cr. 3. S.

Prereq: PSYCH 230 or PSYCH 280; PSYCH 301; PSYCH 313, PSYCH 316, PSYCH 318, PSYCH 360, or PSYCH 380

Theory and research on development and occurrence of human aggression; implications for prevention and treatment.

PSYCH 488: Cultural Psychology

(3-0) Cr. 3.

Prereq: PSYCH 280 and PSYCH 301; junior classification

Examination of the ways that cultural beliefs, values, and affordances shape cognitive, developmental, social and other psychological phenomena, as well as the forces that shape and change culture. Meets International Perspectives Requirement.

PSYCH 490: Independent Study

Cr. 1-3. Repeatable, maximum of 9 credits. F.S.SS.

Prereq: Junior classification, 6 credits in psychology, and permission of instructor

Supervised reading in an area of psychology. Writing requirement. No more than 9 credits of Psych 490 may be counted toward a degree in psychology.

PSYCH 491: Research Practicum

Cr. arr. Repeatable, maximum of 9 credits. F.S.SS.

Prereq: Junior classification, permission of instructor, and credit or enrollment in PSYCH 301

Supervised research in an area of psychology. Primarily for students intending to pursue graduate education. No more than 9 credits of Psych 491 may be counted toward a degree in psychology.

PSYCH 492: Fieldwork Practicum

Cr. arr. Repeatable, maximum of 9 credits. F.S.SS. *Prereq: Junior classification, 12 credits in psychology, and permission of instructor*

Supervised fieldwork in one of the following applied psychology settings. Offered on a satisfactory-fail basis only. No more than 9 credits of Psych 492 may be counted toward a degree in psychology.

PSYCH 492A: Fieldwork Practicum: Human Services

Cr. arr. Repeatable, maximum of 9 credits. F.S.SS. *Prereq: Junior classification, 12 credits in psychology and permission of instructor* Offered on a satisfactory-fail basis only.

PSYCH 492B: Fieldwork Practicum: I/O Psychology

Cr. arr. Repeatable, maximum of 9 credits. F.S.SS. *Prereq: Junior classification, 12 credits in psychology including PSYCH 450 or PSYCH 250 and enrollment in PSYCH 450, and permission of instructor.* Offered on a satisfactory-fail basis only.

Courses primarily for graduate students, open to qualified undergraduates:

PSYCH 501: Foundations of Behavioral Research

(3-0) Cr. 3. F.S.

Prereq: STAT 401 or equivalent

Ethical issues, research design, sampling design, measurement issues, power and precision analysis, interpretation of statistical results in nonexperimental, quasi-experimental, and experimental research, use of statistical packages.

PSYCH 505: History of Psychology

(Dual-listed with PSYCH 405). (3-0) Cr. 3. S.

Prereq: 4 courses in psychology

Origins of psychology in philosophy, physiology, medicine and religion. Development as a scientific discipline during the nineteenth and twentieth centuries. Historical overview of clinical practice and theory.

PSYCH 508: Research Methods in Applied Psychology

(3-0) Cr. 3.

Prereq: PSYCH 440 and PSYCH 501 or STAT 401

Methods and issues in applied psychological research. Role of theory in research, fidelity of measurement, selection of subjects, sampling, ethical issues, experimenter bias, data collection methods, power analysis, and professional standards for writing research articles. Emphasis on research methodological issues, not statistical issues.

PSYCH 510: Behavioral Neurology

(Dual-listed with PSYCH 410). (3-0) Cr. 3. F.

Prereq: PSYCH 101; PSYCH 310 or equivalent.

Examination of the neuroanatomical foundation of cognition, affect, and action from a neurological perspective. Focus on basic and applied research with neurological patients.

PSYCH 516: Advanced Cognition

(3-0) Cr. 3. F.S.

Prereq: PSYCH 316

Theoretical models and empirical research in human cognition including perception, attention, memory, concepts/categorization, imagery, and judgment and decision making.

PSYCH 519: Cognitive Neuropsychology

(3-0) Cr. 3.

Prereq: PSYCH 310 and PSYCH 316 or PSYCH 313; graduate classification or permission of instructor

Psychological models and related neurological substrates underlying cognition in normal and brain-damaged individuals.

PSYCH 521: Cognitive Psychology of Human Computer Interaction

(Cross-listed with HCl). (3-0) Cr. 3.

Prereq: Graduate classification or instructor approval

Biological, behavioral, perceptual, cognitive and social issues relevant to human computer interactions.

PSYCH 522: Scientific Methods in Human Computer Interaction

(Cross-listed with HCI). (3-0) Cr. 3. Alt. S., offered odd-numbered years. Prereq: PSYCH 521 and STAT 101 or equivalent

Basics of hypothesis testing, experimental design, analysis and interpretation of data, and the ethical principles of human research as they apply to research in human computer interaction.

PSYCH 533: Theories of Learning

(Cross-listed with EDUC). (3-0) Cr. 3. F.

Major theories of learning and cognition in educational settings. Emphasis on behavioral, cognitive, constructivist, and sociocultural theories and their implications for educational policy and practice.

PSYCH 538: Developmental Disabilities

(Cross-listed with HD FS). (3-0) Cr. 3. Alt. F., offered odd-numbered years. *Prereq:* 9 *credits in human development and family studies or psychology or permission of instructor*

Theories, research, and current issues regarding the intersection of development and disabilities. Investigation of interventions with individuals and families. (on-line course offering via Distance Education).

PSYCH 542: Applied Psychological Measurement

(3-0) Cr. 3. F.

Prereq: PSYCH 440

Principles of psychological measurement, including concepts of reliability and validity; interpretation of scores; factors influencing performance; test construction and use of measures of intelligence, ability, achievement, vocational interest, and personality. Ethical and multicultural issues in measurement.

PSYCH 544: Practicum in Assessment

(2-1) Cr. 2. F.S.

Prereq: PSYCH 542 and admission into the PhD program in counseling psychology

Supervised practice in integration of clinical interviewing, behavioral observation, and administration, scoring, and interpreting individual tests of cognitive function.

PSYCH 560: Advanced Personality Psychology

(3-0) Cr. 3.

Prereq: 4 courses in psychology, including PSYCH 360 Advanced analysis of contemporary theory and research on personality measurement, development, heritability, and social expression.

PSYCH 561: Psychopathology and Behavior Deviations

(3-0) Cr. 3.

Prereq: PSYCH 460

Examination of DSM and research based perspectives pertinent to the major forms of adult psychopathology including: anxiety, mood, psychotic, personality and other disorders. Coverage of research examining causes, development, and clinical issues concerning adult psychopathology.

PSYCH 562: Personality Assessment

(3-0) Cr. 3.

Prereq: PSYCH 360, PSYCH 440, PSYCH 542, and PSYCH 501 or STAT 401 and admission to the PhD program in counseling psychology Principles, concepts, and methods of personality assessment. Though not a practicum course, exposure is given to a variety of objective, projective, and situational tests.

PSYCH 580: Advanced Social Psychology: Psychological Perspectives (3-0) Cr. 3.

Prereq: 4 courses in psychology, including PSYCH 280

Current theories, methods, and research in social psychology with an emphasis on cognitive and interpersonal processes such as attribution, social cognition, attitude change, attraction, aggression, and social comparison.

PSYCH 590: Special Topics

Cr. arr. Repeatable.

Prereq: 12 credits in psychology, and permission of instructor Guided reading on special topics or individual research projects in the following areas.

PSYCH 590A: Special Topics: Counseling

Cr. arr. Repeatable. Prereq: 12 credits in psychology, and permission of instructor

PSYCH 590Q: Special Topics: Cognitive

Cr. arr. Repeatable. Prereq: 12 credits in psychology, and permission of instructor

PSYCH 590R: Special Topics: Social

Cr. arr. Repeatable. Prereq: 12 credits in psychology, and permission of instructor

PSYCH 590Z: Special Topics: General

Cr. arr. Repeatable. Prereq: 12 credits in psychology, and permission of instructor

PSYCH 592: Seminar in Psychology

(1-0) Cr. 1-3. Repeatable.*Prereq: 12 hours in psychology or graduate classification.*Seminar in the following areas.

PSYCH 592C: Seminar in Psychology: Developmental

(1-0) Cr. 1-3. Repeatable. F.S. Prereq: 12 hours in psychology or graduate classification.

PSYCH 592P: Seminar in Psychology: Research Methods and Psychometrics (1-0) Cr. 1-3. Repeatable.

Prereq: 12 hours in psychology or graduate classification.

PSYCH 592Z: Seminar in Psychology: General (1-0) Cr. 1-3. Repeatable. Prereq: 12 hours in psychology or graduate classification.

PSYCH 594: Quantitative Behavioral Methods (1-0) Cr. 1. F.S.

Prereq: PSYCH 501 or equivalent

Specialized quantitative methods for social and behavioral research problems in the following areas.

PSYCH 594A: Quantitative Behavioral Methods: Classical psychometric theory (1-0) Cr. 1. F.S.

Prereq: PSYCH 501 or equivalent

PSYCH 594B: Quantitative Behavioral Methods: Modern psychometric methods (1-0) Cr. 1. F.S.

Prereq: PSYCH 501 or equivalent

PSYCH 594C: Quantitative Behavioral Methods: Construct validation (1-0) Cr. 1. F.S. Prereq: PSYCH 501 or equivalent

PSYCH 594D: Quantitative Behavioral Methods: Multi-dimensional scaling (1-0) Cr. 1. F.S. Prereq: PSYCH 501 or equivalent

PSYCH 594E: Quantitative Behavioral Methods: Cluster Analysis (1-0) Cr. 1. F.S. Prereq: PSYCH 501 or equivalent

PSYCH 594F: Quantitative Behavioral Methods: Meta-analysis (1-0) Cr. 1. F.S. Prereq: PSYCH 501 or equivalent

PSYCH 594G: Quantitative Behavioral Methods: Longitudinal analysis (1-0) Cr. 1. F.S. *Prereq: PSYCH 501 or equivalent*

PSYCH 594I: Quantitative Behavioral Methods: Focus Groups (1-0) Cr. 1. F.S. *Prereq: PSYCH 501or equivalent*

PSYCH 594K: Quantitative Behavioral Methods: Mediation and Moderation

(1-0) Cr. 1. F.S.Prereq: PSYCH 501 or equivalentSpecialized quantitative methods for social and behavioral research problems.

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PSYCH 594L: Quantitative Behavioral Methods: Missing Data (1-0) Cr. 1. F.S. *Prereq: PSYCH 501 or equivalent.* Specialized quantitative methods for social and behavioral research problems.

PSYCH 594M: Quantitative Behavioral Methods: Power Analysis

(1-0) Cr. 1. F.S. *Prereq: PSYCH 501 or equivalent* Specialized quantitative methods for social and behavioral research problems.

PSYCH 595: Seminar in Social Psychology Cr. 1-3. Repeatable. F.S. *Prereq: 12 credits in Psychology* Seminar in the following areas in social psychology.

PSYCH 595A: Seminar in Social Psychology: Social Cognition Cr. 1-3. Repeatable. F.S.

Prereq: 12 credits in Psychology

PSYCH 595B: Seminar in Social Psychology: Aggression Cr. 1-3. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 595C: Seminar in Social Psychology: Culture Cr. 1-3. Repeatable. F.S. Prereq: 12 credits in Psychology

PSYCH 595D: Seminar in Social Psychology: Attitudes and Attitude Change

Cr. 1-3. Repeatable. F.S. Prereq: 12 credits in Psychology

PSYCH 595E: Seminar in Social Psychology: Psychology and Law Cr. 1-3. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 595F: Seminar in Social Psychology: Health Psychology Cr. 1-3. Repeatable. Alt. S., offered irregularly. Prereq: 12 credits in Psychology

PSYCH 595G: Seminar in Social Psychology: Close Relationships Cr. 1-3. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 5951: Seminar in Social Psychology: General Cr. arr. Repeatable. F.S. *Prereq: 12 credits in Psychology* PSYCH 596: Seminar in Counseling Psychology Cr. arr. Repeatable. F.S. *Prereq: 12 credits in Psychology* Seminar in the following areas in counseling psychology.

PSYCH 596A: Seminar in Counseling Psychology: Supervision Cr. arr. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 596B: Seminar in Counseling Psychology: Research Cr. arr. Repeatable. F.S. Prereq: 12 credits in Psychology

PSYCH 596C: Seminar in Counseling Psychology: Multicultural Cr. arr. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 596D: Seminar in Counseling Psychology: Professional Issues and Ethics Cr. arr. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 596E: Seminar in Counseling Psychology: General Cr. arr. Repeatable. F.S. *Prereq: 12 credits in Psychology*

PSYCH 597: Internship in Psychology

Cr. R. *Prereq: M.S. degree candidacy; permission of instructor* Full-time, non-clinical, supervised experience in a setting relevant to psychology. Intended for master's degree level internships.

PSYCH 598: Seminar in Cognitive Psychology

Cr. 0. Repeatable. F.S. Prereq: PSYCH 516, PSYCH 501 or STAT 401. Seminar in the following areas in cognitive psychology.

PSYCH 598A: Seminar in Cognitive Psychology: Attention and Perception Cr. arr. Repeatable. F.S. *Prereq: PSYCH 516, PSYCH 501 or STAT 401*

PSYCH 598B: Seminar in Cognitive Psychology: Memory Cr. arr. Repeatable. F.S. Prereq: PSYCH 516, PSYCH 501 or STAT 401

PSYCH 598C: Seminar in Cognitive Psychology: Cognitive Neuroscience Cr. arr. Repeatable. F.S. Prereq: PSYCH 516, PSYCH 501 or STAT 401

PSYCH 598D: Seminar in Cognitive Psychology: Judgment and Decision Making Cr. arr. Repeatable. F.S. Prereq: PSYCH 516, PSYCH 501 or STAT 401 PSYCH 598E: Seminar in Cognitive Psychology: Evolution Cr. arr. Repeatable. F.S. Prereq: PSYCH 516, PSYCH 501 or STAT 401

PSYCH 598F: Seminar in Cognitive Psychology: Language

Cr. arr. Repeatable. F.S. Prereq: PSYCH 516, PSYCH 501 or STAT 401

PSYCH 598G: Seminar in Cognitive Psychology: Applied Cr. arr. Repeatable. F.S.

Prereq: PSYCH 516, PSYCH 501 or STAT 401

PSYCH 598I: Seminar in Cognitive Psychology: General Cr. arr. Repeatable. F.S.

Prerea: PSYCH 516, PSYCH 501 or STAT 401

PSYCH 599: Creative Component Cr. arr. Offered on a satisfactory-fail basis only.

Courses for graduate students:

PSYCH 605: Multi-level Modeling

(Cross-listed with HD FS). (3-0) Cr. 3. Alt. S., offered odd-numbered years. *Prereq: HD FS 503 and HD FS 505 or STAT 404 or permission of instructor* Rationale for and interpretation of random coefficient models. Strategies for the analysis of multi-level and panel data including models for random intercepts, random slopes, and growth curves.

PSYCH 621: Psychological Counseling -Theory and Process

(3-0) Cr. 3. F.

Prereq: 3 courses in psychology and permission of instructor Overview of major counseling theories with emphases upon: key concepts of theories, the role of the counselor, and applications of theory in fostering client change.

PSYCH 621L: Psychological Counseling -Theory and Process: Techniques in Counseling

(0-6) Cr. 3. F.

Prereq: permission of instructor required

Development of basic counseling skills and techniques through observation, role-playing, case studies, and supervised counseling sessions.

PSYCH 623: Vocational Behavior

(3-0) Cr. 3.

Prereq: 3 courses in psychology or graduate classification Theoretical views, research, and issues in career development through the life span. Methods of career counseling, including appraisal interviewing, assessment, test interpretation, and use of information sources.

PSYCH 626: Group Counseling

(2-2) Cr. 3.

Prereq: Graduate classification

Theory, research, ethical issues, and therapeutic considerations relevant to group counseling. Participation in lab exercises for development of group counseling skills and observation of ongoing groups.

PSYCH 633: Teaching of Psychology

(3-0) Cr. 3. S.

Prereq: Enrollment in doctoral degree program in psychology and permission of instructor

Orientation to teaching of psychology at college level: academic issues and problems, instructional and evaluative techniques.

PSYCH 691: Practicum in Psychology

Cr. arr. F.S. *Prereq: Prereg: Permission of instructor* Supervised practice and experience in the following fields of specialization in applied psychology.

PSYCH 691A: Practicum in Psychology: Counseling (Beginning)

Cr. 1-3. Repeatable, maximum of 6 credits. F.S. *Prereq: PSYCH 621L*

PSYCH 691B: Practicum in Psychology: Counseling (Intermediate) Cr. 1-3. Repeatable, maximum of 6 credits. F.S. Prereq: Permission of instructor, PSYCH 691A

PSYCH 691C: Practicum in Psychology: Counseling (Advanced) Cr. 1-3. Repeatable, maximum of 6 credits. F.S.

Prereq: Permission of instructor, PSYCH 691A, PSYCH 691B

PSYCH 691D: Practicum in Psychology: Counseling (Advanced External Practicum)

Cr. 1-3. Repeatable. F.S. Prereq: Permission of instructor, PSYCH 691A, PSYCH 691B

PSYCH 691G: Practicum in Psychology: Group Counseling Cr. 1-3. F.S.

Prereq: Prereg: Permission of instructor, PSYCH 626, PSYCH 691A

PSYCH 691S: Practicum in Psychology: Supervision

Cr. 1-3. F.S.

Prereq: Permission of instructor, PSYCH 592A, PSYCH 621L

PSYCH 691T: Practicum in Psychology: Teaching

Cr. 1-3. Repeatable, maximum of 6 credits. F.S. *Prereq: Permission of instructor,PSYCH 633* Offered on a satisfactory-fail basis only.

PSYCH 691Z: Practicum in Psychology: General

Cr. 1-3. Repeatable, maximum of 6 credits. F.S. *Prereq: Permission of instructor*

PSYCH 692: Research Seminar

(1-0) Cr. 1-3. Repeatable.*Prereq: Permission of instructor*Research seminar in the following areas.

PSYCH 692A: Research Seminar: Counseling

(1-0) Cr. 1-3. Repeatable. Prereq: Permission of instructor

PSYCH 692Q: Research Seminar: Cognitive

(1-0) Cr. 1-3. Repeatable. Prereq: Permission of instructor

PSYCH 692R: Research Seminar: Social

(1-0) Cr. 1-3. Repeatable. Prereq: Permission of instructor

PSYCH 692Z: Research Seminar: General

(1-0) Cr. 1-3. Repeatable. Prereq: Permission of instructor

PSYCH 697: Internship in Counseling Psychology

Cr. R. Prereq: Ph.D. candidacy in the Counseling Psychology program, approved dissertation proposal, and permission of instructor Full time supervised predoctoral internship experience in a setting relevant to counseling psychology.

PSYCH 699: Research

Cr. arr. Repeatable. Offered on a satisfactory-fail basis only.