PSYCHOLOGY

The psychological science department offers a master of science in industrial-organizational psychology (I-O). Our MS in I-O psychology degree provides a strong foundation in scientific methods, management of human resources, and applying strategies and training techniques to make organizations more effective. With predicted growth for I-O psychologists higher than average between 2023 and 2033, this career field is in high demand (Occupational Outlook Handbook, U.S. Bureau of Labor Statistics). Additionally, this program has been ranked in the top 10 MS in psychology programs by Forbes Advisor multiple times. Requirements for the program are listed on our website, https:// psych.mst.edu/academic-programs/graduate/. The MS program is offered on campus and via distance education. Additional information about our distance education program can be found at the distance and continuing education website, https://distance.mst.edu/distanceprograms/distance-graduate-degrees/industrial-organizationalpsychology/.

The department also offers an on-campus PhD in applied psychology with two possible tracks: applied social/I-O psychology and applied cognitive psychology. Applied social/industrial-organizational psychology focuses on societal and organizational/workplace systems and structures that influence individuals, particularly employees, as well as the ways in which individuals impact and influence their organizational/ workplace/societal institutions. Applied cognitive psychology focuses on the application of foundational cognitive processes (e.g., attention, sensation, perception, motivation, rationality, decision-making, neurological processes, etc.) to real-world challenges and solutions (e.g., by improving health, improving technology, and improving sociotechnical systems such as institutions). Within the Applied cognitive psychology Track, students are also able to choose a particular concentration (cognition & health, cognition & technology, or cognition & organizations). Designed to meet growing industry demands, the applied psychology PhD prepares students to address challenges in workplaces, health, technology, and beyond. Tailored curriculum and expert mentorship equip graduates for success in academia, industry, and highgrowth fields. More information is available on our website, https:// psych.mst.edu/academic-programs/phdinappliedpsychology/.

Master of Science in Industrial-Organizational Psychology

Admission Requirements

Students interested in the M.S. in I-O psychology program should review the admissions requirements listed on our website (https://psych.mst.edu/academic-programs/graduate/admission-requirements/).

Program Requirements

The M.S. in industrial-organizational psychology requires 37 credit hours which includes a thesis or non-thesis option. Students will complete 21 credit hours of core courses, 10 hours of methods courses, and either 6 hours of elective credits or 6 hours of thesis credits. Applied internship experiences are suggested, but not required as part of the program. The program will take at least 2 years to complete and classes are offered both on-campus and via distance.

Core Courses (21 hours)

| PSYCH 5020 | Introduction to Industrial-Organizational Psychology |
|------------|--|
| PSYCH 5601 | Small Group Dynamics |
| PSYCH 5700 | Job Analysis and Performance Management |

| PSYCH 6610 | Leadership, Motivation, and Culture | | |
|--|--|--|--|
| PSYCH 6702 | Personnel Selection | | |
| PSYCH 6602 | Organizational Development & Employee Perspectives | | |
| PSYCH 6700 | Training and Development | | |
| Methods Courses (10 ho | ours) | | |
| PSYCH 5201 | Psychometrics | | |
| PSYCH 5210 | Advanced Research Methods | | |
| PSYCH 5012 | Ethics and Professional Responsibilities | | |
| PSYCH 5202 | Applied Psychological Data Analysis | | |
| Electives from list below or Thesis (6 hours) | | | |
| PSYCH 5710 | Advanced Human Factors | | |
| PSYCH 5600 | Advanced Social Psychology | | |
| PSYCH 5740 | Occupational Health and Safety | | |
| PSYCH 5001 | Special Topics | | |
| Students completing a thesis would need to complete the following in place of electives: | | | |
| PSYCH 6099 | Research | | |

Applied Psychology

Applied Psychology involves the application of science from a wide range of psychology subfields, including industrial/organizational (I-O) psychology, developmental psychology, social psychology, cognitive psychology, human factors, health psychology, and program evaluation. Students completing the Applied Psychology Ph.D. program will have the ability to:

- Apply knowledge of subject matter within the field of applied psychology, specifically applied social/I-O psychology and applied cognitive psychology.
- Utilize research and critical thinking skills to apply the science of applied psychology to industry- and every-day-focused challenges, solutions, and outcomes.
- Communicate effectively with scientists and non-scientists alike as determined by the context.
- Independently identify, explain, and develop scholarship (professional or research-based), including a clear plan for addressing research- and practice-driven questions.
- Exhibit ethical and professional conduct, both in academic and in industry-based roles.
- Promote a climate of inclusion and engage with diverse members of a variety of communities.

The doctoral curriculum includes two tracks: Applied Social/Industrial-Organizational Psychology and Applied Cognitive Psychology. Applied Social/Industrial-Organizational Psychology focuses on societal and organizational/workplace systems and structures that influence individuals, particularly employees, as well as the ways in which individuals impact and influence their organizational/workplace/societal institutions too. Applied Cognitive Psychology focuses on the application of foundational cognitive processes (e.g., attention, sensation, perception, motivation, rationality, decision-making, neurological processes, etc.) to real-world challenges and solutions (e.g., by improving health, improving technology, and improving socio-technical systems such as institutions). Within the Applied Cognitive Psychology Track,

students are also able to choose a particular concentration (cognition & health, cognition & technology, or cognition & organizations).

Either track (Applied Social/I-O Psychology or Applied Cognitive Psychology) will require 72 hours of graduate credit. For students who enter the program directly with a baccalaureate degree, this will include a minimum of 40 credit hours of 4000-, 5000-, and 6000-level lecture courses, and a minimum of 30 credit hours of graduate research (the remaining 2 credit hours can either be research credit or curriculum credit as determined by the student's degree plan). A minimum of 15 lecture credit hours (of the 40 total credit hours) should be completed in 6000-level courses.

Students who enter with a master's degree in a related field can receive up to 30 credits toward the 72-credit requirement. In line with S&T graduate degree requirements, they will be required to complete an additional minimum of 12 credit hours of 4000-, 5000-, and 6000-level lecture courses and 24 credit hours of research. A minimum of 9 lecture credit hours (of the 12 credit hours required to be completed at S&T) should be completed in 6000-level courses.

A qualifying exam will be successfully completed no later than the end of the fifth semester of enrollment, and a plan of study will be approved by a student's advisory committee by the end of the semester in which the qualifying exam is passed. A comprehensive exam will be completed after the student has completed at least 50% of the coursework. Upon conclusion of the research, the student will complete a written dissertation and successfully defend it in an oral defense.

Applied Social/I-O Psychology Track Course Requirements

Required Foundational Content (6 credit hours total):

| PSYCH 5020 | Introduction to Industrial-Organizational Psychology | 3 |
|--|--|---|
| PSYCH 5600 | Advanced Social Psychology | 3 |
| Required Core Content-0 | Choose 5 courses (15 credit hours total): | |
| PSYCH 5601 | Small Group Dynamics | 3 |
| PSYCH 5603 | Advanced Social Influence | 3 |
| PSYCH 5604 | Advanced Diversity Science | 3 |
| PSYCH 5700 | Job Analysis and Performance Management | 3 |
| PSYCH 5740 | Occupational Health and Safety | 3 |
| PSYCH 6200 | Multilevel Modeling for Social Science | 3 |
| PSYCH 6610 | Leadership, Motivation, and Culture | 3 |
| PSYCH 6602 | Organizational Development & Employee Perspectives | 3 |
| PSYCH 6700 | Training and Development | 3 |
| PSYCH 6702 | Personnel Selection | 3 |
| Required Methods Cour | ses (13 credit hours total): | |
| PSYCH 5201 | Psychometrics | 3 |
| PSYCH 5202 | Applied Psychological Data Analysis | 3 |
| PSYCH 5210 | Advanced Research Methods | 3 |
| PSYCH 5012 | Ethics and Professional Responsibilities | 1 |
| or PSYCH 6010 | Professional Seminar | |
| Data analysis/statistics with advisor approval | -based elective from outside the department – to be chosen | 3 |
| Elective Courses-Choos | e 2 courses (6 credit hours total): | |
| PSYCH 5400 | Advanced Cognition | 3 |
| PSYCH 5710 | Advanced Human Factors | 3 |
| PSYCH 5720 | Advanced Psychology of Social Technology | 3 |
| PSYCH 6400 | Advanced Cognitive Neuroscience | 3 |
| PSYCH 6401 | Advanced Rationality & Decision Making | 3 |
| PSYCH 6402 | Cognition and Al | 3 |
| PSYCH 6500 | Advanced Health Psychology | 3 |
| PSYCH 6501 | Substance Use and Health | 3 |
| PSYCH 6502 | Cognition and Aging | 3 |
| | | |

| PSYCH 6720 | Moral Psychology of Technology | 3 |
|---------------|---|---|
| PSYCH 6085 | Internship | 3 |
| BUS 5111 | Business Negotiations | 3 |
| BUS 5980 | Business Models for Entrepreneurship and Innovation | 3 |
| COMP SCI 5409 | Applied Social Network Analysis | 3 |
| ECON 5644 | Creativity, Innovation, and Sustainability | 3 |
| ENG MGT 5320 | Project Management | 3 |
| ENG MGT 5710 | Six Sigma | 3 |
| IS&T 5251 | Management and Leadership of Technological Innovation | 3 |

Applied Cognitive Psychology Track Course Requirements

| Required Core Content (9 credit hours total): | | |
|---|---|---|
| | ` ' | |
| PSYCH 5400 | Advanced Cognition | 3 |
| PSYCH 5710 | Advanced Human Factors | 3 |
| PSYCH 6400 | Advanced Cognitive Neuroscience | 3 |
| or PSYCH 6401 | Advanced Rationality & Decision Making | |
| Required Methods Cou | rses (13 credit hours total): | |
| PSYCH 5201 | Psychometrics | 3 |
| PSYCH 5202 | Applied Psychological Data Analysis | 3 |
| PSYCH 5210 | Advanced Research Methods | 3 |
| or PSYCH 5211 | Research Methods in Cognition & Neuroscience | |
| PSYCH 5012 | Ethics and Professional Responsibilities | 1 |
| or PSYCH 6010 | Professional Seminar | |
| Data analysis/statistic with advisor approval | s-based elective from outside the department – to be chosen | 3 |

Applied Cognitive Psychology students can choose among a variety of electives and concentrations based on their area of interest and work with their advisor (18 credits total – 6 courses). Students will be encouraged to choose a particular concentration, but they may be able to build their own concentration with appropriate advisor approval/guidance. Of the 18 credit hours, students will be required to complete a minimum of 9 of those hours in the Psychological Science department. Beyond the courses listed below, students may consider additional advanced statistics courses in other departments if agreed upon with their advisor.

Applied Cognition & Health Concentration-Choose 6 courses (18 credit hours total): PSYCH 5740 Occupational Health and Safety 3 PSYCH 6500 Advanced Health Psychology 3 PSYCH 6501 3 Substance Use and Health PSYCH 6502 Cognition and Aging 3 PSYCH 6085 Internship 3 BIO SCI 5343 Biology of Aging 3 BIO SCI 5353 Developmental Biology 3 BIO SCI 6533 Advanced Neurobiology 3 COMP SCI 5401 **Evolutionary Computing** 3 Applied Cognition & Technology Concentration-Choose 6 courses (18 credit hours total): PSYCH 5700 3 Job Analysis and Performance Management PSYCH 5720 Advanced Psychology of Social Technology 3 PSYCH 6402 Cognition and AI 3 PSYCH 6720 Moral Psychology of Technology 3 3 PSYCH 6085 BUS 5730 Machine Learning and Artificial Intelligence for Business 3 COMP SCI 5400 Introduction To Artificial Intelligence 3 COMP SCI 5403 Introduction to Robotics 3 COMP SCI 5404 Introduction to Computer Vision IS&T 5251 Management and Leadership of Technological Innovation 3 IS&T 5450 Introduction to Information Visualization IS&T 5885 Human-Computer Interaction and User Experience 3 IS&T 5887 Human-Computer Interaction Evaluation 3

| TCH COM 5530 | Usability Studies | 3 |
|------------------------------------|--|---|
| Applied Cognition & Org total): | panizations Concentraion-Choose 6 courses (18 credit hours | |
| PSYCH 5700 | Job Analysis and Performance Management | 3 |
| PSYCH 5740 | Occupational Health and Safety | 3 |
| PSYCH 6200 | Multilevel Modeling for Social Science | 3 |
| PSYCH 6700 | Training and Development | 3 |
| PSYCH 6085 | Internship | 3 |
| BUS 5730 | Machine Learning and Artificial Intelligence for Business | 3 |
| COMP SCI 5409 | Applied Social Network Analysis | 3 |
| ECON 5644 | Creativity, Innovation, and Sustainability | 3 |
| ENG MGT 5110 | Managerial Decision Making | 3 |
| IS&T 5251 | Management and Leadership of Technological Innovation | 3 |
| IS&T 5887 | Human-Computer Interaction Evaluation | 3 |

Applied Workplace Psychology

The applied workplace psychology graduate certificate is designed to serve as a recruitment tool for the industrial-organizational psychology MS program. This program will offer students a set of foundational courses in industrial and organizational psychology. Students who pass all four courses with a cumulative GPA of 3.0 or better can gain entry to the I-O psychology MS program with the other application requirements being waived. The included courses cover an introductory I-O course, an advanced research methods course, a course on job analysis and performance appraisal and a small group dynamics course which will examine groups and teams in organizations.

All four courses included in the applied workplace psychology certificate curriculum will be offered once per year. All of these courses are available both on-campus as well as via distance.

Fall Courses:

| PSYCH 5020 | Introduction to Industrial-Organizational Psychology | 3 |
|-----------------|--|---|
| PSYCH 5210 | Advanced Research Methods | 3 |
| Spring Courses: | | |
| PSYCH 5601 | Small Group Dynamics | 3 |
| PSYCH 5700 | Job Analysis and Performance Management | 3 |
| | | |

Admissions requirements for the applied workplace psychology certificate are available at https://psych.mst.edu/academic-programs/graduate/admission-requirements/

Students admitted to the applied workplace psychology certificate program will have non-degree graduate status, however, they will earn graduate credit for the course they complete. If the student completes the four-course sequence with a cumulative GPA of 3.0 or better, they, upon application, will be admitted to the M.S. degree program in industrial organizational psychology. The certificate credits taken by the students admitted to the M.S. degree program will count towards their master's degrees. Students who do not have all of the prerequisite courses necessary to begin the courses in the applied workplace psychology certificate program will be allowed to take "bridge" courses at either the graduate or undergraduate level to prepare for the formal certificate courses.

Human Factors Psychology Certificate

This certificate is designed to give students expertise in how people interact with engineered systems and devices. Students will increase their understanding of how to engage in human-centered design and better support interactions between humans and technology. This

certificate will help advance multiple career paths including humanfocused paths to better understand technology and technology-focused paths to better understand human perspective.

Students will have greater expertise understanding and critically analyzing the intersection of technology design and implementation with human capacity and approaches, including the use of technology for communication, occupational health and safety standards, understanding and use of information systems, and using technology to connect to customers/the market.

Course requirements include the following:

| F | PSYCH 5710 | Advanced Human Factors | 3 |
|---|-------------------------|--|---|
| A | and 3 of the following: | | |
| | PSYCH 4720 | Psychology of Social Technology | |
| | PSYCH 5740 | Occupational Health and Safety | |
| | TCH COM 5530 | Usability Studies | |
| | IS&T 5885 | Human-Computer Interaction and User Experience | |
| | BUS 5150 | Customer Focus and Satisfaction | |

This program is open to all persons holding a bachelor's, master's, or doctorate degree in psychology, business, or a related field, with a preferred minimum of one year of professional employment experience. Minimum undergraduate GPA is 3.0.

Amy Belfi, Associate Professor PHD Univeristy of Iowa

Devin Burns, Associate Professor PHD Indiana University

Jessica L. Cundiff, Associate Professor PHD Pennsylvania State University

Amber M Henslee, Associate Professor PHD Auburn University Main Campus

Merilee A. Krueger, Teaching Professor EdD University of Missouri

Clair Kueny, Associate Professor and Chair PHD Saint Louis University

Frances H Montgomery, Emeritus Professor PHD Florida State University

Susan L Murray, Professor 1 PHD Texas A&M University

Matthew Ng, Assistant Professor PHD University of Central Florida

Vahe Permzadian, Assistant Professor PHD University at Albany, State University of New York

Ann Schlotzhauer, Assistant Professor PHD University of Central Florida

Daniel Shank, Associate Professor PHD University of Georgia

Ting Shen, Assistant Professor PHD Michigan State University

Nancy J Stone, Professor Emerita PHD Texas Tech University

PSYCH 5000 Special Problems (IND 0.0-6.0)

Problems or readings on specific subjects or projects in the department. Consent of instructor required.

PSYCH 5001 Special Topics (LEC 0.0-6.0)

This course is designed to give the department an opportunity to test a new graduate level course. Variable title.

PSYCH 5010 Seminar for Industrial / Organizational Psychology (RSD 3.0) A seminar course for general overviews of the most recent research in Industrial-Organizational Psychology. Prerequisite: Graduate standing.

PSYCH 5012 Ethics and Professional Responsibilities (LEC 1.0)

Case studies examining the ethical practice of psychology in organizations will be discussed. This will include covering both the legal and ethical standards surrounding the consulting and practice of I-O psychology and personnel management in organizations. Prerequisite: Graduate standing.

PSYCH 5020 Introduction to Industrial-Organizational Psychology (LEC 3.0) Review of the most recent theoretical and applied research in advanced personnel and organizational psychology. Topics will include personnel selection, training and performance appraisal, job attitudes, motivation, work groups and teams, leadership, organizational culture, and organizational development. Prerequisites: Graduate Standing.

PSYCH 5040 Oral Examination (IND 0.0)

(Variable) After completion of all other program requirements, oral examinations for on-campus M.S./PH.D students may be processed during intersession. Off-campus M.S. students must be enrolled in oral examination and must have paid an oral examination fee at the time of the defense/comprehensive examination (oral/written). All other students must enroll for credit commensurate with uses made of facilities and/or faculties. In no case shall this be for less than three (3) semester hours for resident students.

PSYCH 5200 Theories and Practice of Psychological Measurement (LEC 3.0) An overview of psychological tests and batteries used in a variety of disciplines. An emphasis is placed on the proper development and use of these tests and test batteries. Tests examined will include tests of intelligence, aptitude, personality, and psychopathology. Prerequisite: Psych 4200 or graduate standing.

PSYCH 5201 Psychometrics (LEC 3.0)

An examination of statistical methods used to develop and refine measures of human performance, aptitudes, and personality. Topics include reliability and validity, data reduction, measuring interrelationships among variables (e.g., factor analysis, multiple regression), and testing group differences. Prerequisite: Psych 5202.

PSYCH 5202 Applied Psychological Data Analysis (LEC 3.0)

This course will focus on those statistical methods most useful for advanced research in psychology. We will learn to use R, a powerful, open-source statistical programming platform, and work through examples with psychological data sets including such techniques as correlation, ANOVAs, regression, and chi-squared. Prerequisite: Graduate standing.

PSYCH 5210 Advanced Research Methods (LEC 3.0)

Research methods and techniques, with an emphasis on conducting psychological research in organizational settings. Topics discussed include: ethics, reliability and validity in measurement and application, proper uses of experimental, quasi-experimental, and survey methodologies, as well as advanced methodologies IRT, SEM, HLM, and Meta-Analyses. Prerequisite: Graduate standing.

PSYCH 5211 Research Methods in Cognition & Neuroscience (LEC 3.0)

The course focuses on methodological approaches essential for investigating cognitive processes and neural mechanisms, integrating theoretical foundations with practical skills. Students will explore a range of quantitative and qualitative research methods applicable to studying cognition and neuroscience, including experimental designs, neuroimaging techniques (e.g., fMRI, EEG/ERP, PET), psychophysiological measures, computational modeling, and observational methods. Emphasis is placed on methodological considerations specific to cognitive neuroscience. Prerequisites: Graduate standing.

PSYCH 5400 Advanced Cognition (LEC 3.0)

This course covers advanced discussion of cognitive processes and their application. Theory and research are presented on attention, perception, memory, problem solving, decision-making and language. Prerequisites: Graduate standing.

PSYCH 5600 Advanced Social Psychology (LEC 3.0)

An advanced study of the behavior of individuals in interaction within groups. Consideration will also be given to the experimental literature dealing with the formal properties of groups, conformity and deviation, intergroup relations, and attitude formation and attitude change. Prerequisite: Psych 4600 or graduate standing.

PSYCH 5601 Small Group Dynamics (LEC 3.0)

This course covers group perception, identification, leadership, structure, conflict, cohesion, commitment, performance, norms, roles, influence, and decisions, and groups' relations, networks, and work teams. Students consider both theory and applications to their lives and organizations through observational, research, team and applied assignments. Prerequisite: Psych 4601 or graduate standing.

PSYCH 5602 Organizational Development (LEC 3.0)

Examination of the field of organizational development theories and interventions. An emphasis is placed on research methods and application of practices related to individual processes, group processes, and organizational structures and functions that impact change and development strategies and interventions. Prerequisite: Psych 4602 or graduate standing.

PSYCH 5603 Advanced Social Influence (LEC 3.0)

An in-depth review of the principles and procedures that affect the process of social influence, with consideration given to attitudinal, compliance inducing, and perceptual influences. Students will consider the theoretical implications and practical applications of topics in social influence in the form of independent reading, research proposals and/or projects, and observational assignments. Prerequisites: Graduate standing.

PSYCH 5604 Advanced Diversity Science (LEC 3.0)

This course examines social psychological theory and research on barriers and opportunities for promoting diversity, equity, and inclusion in organizations. The course takes a sociocultural approach to understand the psychological mechanisms of stereotyping, bias, and stigma, as well as strategies (and pitfalls) for creating inclusive and equitable communities. Although diversity science is multidisciplinary, this course is grounded in psychological theory and research, drawing primarily from industrial/organizational, organizational behavior, and social psychological literatures. Prerequisites: Graduate standing.

PSYCH 5700 Job Analysis and Performance Management (LEC 3.0)

A focus on the scientific measurement of job performance. An indepth discussion of the science and methods of appropriate job and task analysis will be discussed. Additionally, students will focus on current issues in performance management and appraisal including scientific findings related to both objective and subjective measures of performance. Prerequisite: Psych 4700 or graduate standing.

PSYCH 5710 Advanced Human Factors (LEC 3.0)

An in-depth review of the foundations of human factors, focusing on the interaction of people with various forms of technology in a variety of environments. Topics include research and evaluation methods, displays (e.g., visual, auditory), attention and information processing, decision making, motor skills, anthropometry, and biomechanics. (Co-listed with ENG MGT 5330).

PSYCH 5740 Occupational Health and Safety (LEC 3.0)

This course will cover the ethical, legislative, technical, behavioral and management aspects of health and safety practices in human resources. Topics include workplace safety, ergonomics, accident investigation, occupational stress, government regulatory agencies, employee assistance programs, wellness programs, and behavioral based safety. Prerequisites: Graduate standing.

PSYCH 6010 Professional Seminar (RSD 1.0)

This one credit course will provide students with lectures, content, and resources related to their professional development in applied psychology. Prerequisites: Graduate standing.

PSYCH 6085 Internship (IND 0.0-6.0)

Students will apply critical thinking skills and discipline specific knowledge in a work setting based on a project designed by the advisor and employee. Activities will vary depending on the student's background and the setting. Requires a major report. Prerequisites: Completed Core and Methods courses; instructor consent.

PSYCH 6099 Research (IND 0.0-6.0)

Investigations of an advanced nature leading to the preparation of a thesis or dissertation. Prerequisites: Consent of instructor required.

PSYCH 6200 Multilevel Modeling for Social Science (LEC 3.0)

This course will cover the theory, methods, and analytic tools used for multilevel modeling in social science. This will include multilevel modeling methods for organizations, education, and society. Prerequisites: Psych 5202 and Psych 5210, or 5000-Level Statistics Course.

PSYCH 6400 Advanced Cognitive Neuroscience (LEC 3.0)

An in-depth exploration of advanced topics in cognitive neuroscience within the context of applied psychology. The course builds upon foundational knowledge of brain-behavior relationships and delves into current research methodologies, theoretical frameworks, and findings in the field of cognitive neuroscience. Emphasis is placed on understanding neural mechanisms underlying complex cognitive processes such as perception, attention, memory, language, decision-making, and executive function. Prerequisites: Psych 5400.

PSYCH 6401 Advanced Rationality & Decision Making (LEC 3.0)

This graduate-level course offers an advanced exploration of rationality and decision-making processes within the framework of applied psychology. Building upon foundational knowledge in cognitive psychology, the course examines theories, models, and empirical research related to how individuals and groups make decisions in various contexts. Emphasis is placed on understanding the cognitive, emotional, and social factors that influence decision-making, and on developing strategies to enhance rational decision-making in applied settings. Prerequisites: Psych 5400.

PSYCH 6402 Cognition and AI (LEC 3.0)

This course explores the intersection of human cognition and artificial intelligence (AI) within the context of applied psychology. It integrates theories of human cognition with principles, methodologies, and ethical considerations related to AI technologies. Emphasis is placed on understanding how cognitive processes inform the development, implementation, impact, and use of AI systems. Prerequisites: Graduate standing.

PSYCH 6500 Advanced Health Psychology (LEC 3.0)

This course offers an in-depth exploration of theoretical models, research methodologies, and practical applications within the field of health psychology, focusing on the biopsychosocial factors influencing health, illness, and healthcare delivery. Students will critically analyze foundational and contemporary theories in health psychology. Prerequisites: Graduate standing.

PSYCH 6501 Substance Use and Health (LEC 3.0)

An in-depth examination of the complex relationships between substance use, addiction, and health from a psychological perspective. The course integrates theoretical frameworks, empirical research, and practical applications to understand the psychological, social, and biological factors influencing substance use behaviors, addiction development, and treatment outcomes. Emphasis is placed on the biopsychosocial pathways linking substance use to physical and mental health outcomes, as well as the impact on individuals, families, and communities. Prerequisites: Graduate standing.

PSYCH 6502 Cognition and Aging (LEC 3.0)

This course offers a comprehensive exploration of cognitive processes in the context of aging, emphasizing applied psychology perspectives. The course integrates theoretical frameworks, empirical research, and practical applications to understand the complexities of cognitive aging, including both typical and pathological changes in cognition over the adult lifespan. Emphasis is placed on understanding age-related changes in memory, attention, executive function, and decision-making, and their implications for everyday functioning, quality of life, and mental health. Prerequisites: Graduate standing.

PSYCH 6602 Organizational Development & Employee Perspectives (LEC 3.0)

Students will learn about change management theory, different organizational development interventions, their uses, and how to implement them in an organizational setting. Additionally, theory and research surrounding employee attitudes, emotions, and behaviors, particularly as they relate to organizational change and development, will be covered. Prerequisite: Psych 5020, and either preceded or accompanied by Psych 5202.

PSYCH 6610 Leadership, Motivation, and Culture (LEC 3.0)

Examination of research related to leadership, motivation, and the impact of organizational culture on organizational performance will be discussed. The course will focus on the application of psychological theories to enhance organizational functioning and to promote positive workplace behaviors. Prerequisite: Psych 5020.

PSYCH 6611 Leadership for Engineers (LEC 3.0)

Provides engineers with a background in leadership concepts and principles; enables students to develop practical skills in leading and managing through multiple personal assessment. Topics include leadership styles, managing commitments, conflict resolution, change management, emotional intelligence, team dynamics and business ethics. Prerequisite: Eng Mgt 5110 or Psych 4602.

PSYCH 6700 Training and Development (LEC 3.0)

Psychological theories of learning will be covered. Students will learn how evaluate training needs in an organization as well as how to subsequently develop, implement, and validate a training program in an organizational context. Prerequisite: Psych 5700.

PSYCH 6702 Personnel Selection (LEC 3.0)

Current trends and methods in personnel recruitment and selection including classification, and promotion will be examined. An emphasis will be placed on legal and methodological considerations that can impact proper testing and assessment procedures. Cognitive abilities, personality, physical abilities, and other non-cognitive assessments will be discussed. Prerequisite: Psych 5700, Psych 5202, Psych 5201.

PSYCH 6720 Moral Psychology of Technology (LEC 3.0)

Students will critically analyze foundational and contemporary theories in moral psychology, ethical frameworks, and principles relevant to the design, development, and use of technology. Emphasis is placed on understanding how technological innovations, including AI, automation, virtual reality, and social media, influence moral reasoning, ethical dilemmas, and psychological well-being in individuals and communities, and vice versa. Prerequisites: Graduate standing.