PSYCHOLOGY (PSYCH)

PSYCH 1100 Introduction to Psychology (LEC 1.0)
An introduction to the study of psychology at S&T. Students will learn about personal and professional opportunities associated with the different areas of psychology and become acquainted with the psychology faculty and campus facilities.

PSYCH 1101 General Psychology (LEC 3.0)
An introduction to the science of the human mind and behavior. Topics include brain structure and function, human development, learning and memory, motivation, emotion, personality and psychological health, psychological disorders and their treatment, and social cognition and human relationships.

PSYCH 2000 Special Problems (IND 0.0-6.0)
Problems or readings on specific subjects or projects in the department. Consent of instructor required.

PSYCH 2001 Special Topics (IND 0.0-6.0)
This course is designed to give the department an opportunity to test a new course. Variable title.

PSYCH 2200 Research Methods (LAB 1.0 and LEC 3.0)
An introduction to the content, models and methodologies of psychological research. This course covers the fundamental components of psychological research including the literature review, correlational and descriptive methods, experimental design, statistical analyses, interpretation, and ethics. Prerequisites: Psych 1101; Stat 3115, or Stat 3115. Stat 1115 preferred.

PSYCH 2300 Educational Psychology (LEC 3.0)
Principles of psychology relevant to the field of education. Course covers theoretical and applied information on such topics as human growth and development, and cognitive and behavioral views of learning and intelligence. The course also covers motivation, creation of learning environments, measurement and evaluation of learning. Prerequisite: Psych 1101. (Co-listed with Educ 2102).

PSYCH 3000 Special Problems In Psychology (IND 0.0-6.0)
Problems or readings on specific subjects or projects in the department. Consent of instructor required.

PSYCH 3001 Special Topics (IND 0.0-6.0)
This course is designed to give the department an opportunity to test a new course. Variable title.

PSYCH 3110 History Of Psychology (LEC 3.0)
An examination of the origin of psychology within the framework of philosophy and science. Traces the major trends, schools, and individuals. Major scientific, cultural, philosophical and personal influences in the development of psychology. Prerequisite: Psych 1101.

PSYCH 3310 Developmental Psychology (LEC 3.0)
A study of human growth and development across the lifespan. The course emphasizes the interaction of physical, psychological, and social changes and their resulting impact on the developing person at all stages in life. Prerequisite: Psych 1101.

PSYCH 3311 Psychological & Educational Development Of The Adolescent (LEC 3.0)
An examination of the biological, social, and cognitive transitions that occur during adolescence. Other topics include the role of families, the role of peers, the adolescent identity, sexuality, the impact of schools, the role of achievement, how adolescents spend their time (work, leisure), the role of the media, and problems encountered by the adolescent. Prerequisite: Psych 1101.

PSYCH 3400 Theories Of Learning (LEC 3.0)
An examination of basic learning processes and the behavioral phenomena that arise from them. Topics include non-associative learning, classical conditioning, operant conditioning, and vicarious learning. Prerequisite: Psych 1101.

PSYCH 3720 Web Design And Development (LAB 1.5 and LEC 1.5)
This course students learn design principles for effectively structuring information for the World Wide Web; how to use tools to deploy this information; and methods for assessing Web usability. The course is project based with an emphasis on the application of design and usability assessment within the context of student projects. Prerequisite: IS&T 1552.

PSYCH 4000 Special Problems And Readings In Psychology (IND 0.0-6.0)
Problems or readings on specific subjects or projects in the department. Consent of instructor required.

PSYCH 4001 Special Topics (LEC 0.0-6.0)
This course is designed to give the department an opportunity to test a new course. Variable title.

PSYCH 4010 Seminar (RSD 0.0-6.0)
Prerequisite: Senior Standing.

PSYCH 4099 Undergraduate Research (IND 0.0-6.0)
Designed for the undergraduate student who wishes to engage in research. Not for graduate credit. Not more than six credit hours allowed for graduation credit. Subject and credit to be arranged with the instructor. Prerequisite: Instructor consent.

PSYCH 4200 Tests and Measurements (LEC 3.0)
Theoretical and statistical basis of psychological testing and measurement; test development and validation; examination of standardized tests of intelligence, aptitude, interest, personality, attitudes, and psychopathology; use of test and test batteries for diagnostics and prediction of criteria. Prerequisite: Psych 1101.

PSYCH 4310 Psychology Of The Exceptional Child (LEC 3.0)
Study of the psychology of children on both ends of the educational spectrum. The course presents the fundamentals of providing services as well as understanding the abilities and disabilities of children classified as exceptional. Includes coverage of various disabilities, and the implications of dealing with personal, family and classroom issues. Prerequisite: Psych 1101. (Co-listed with Educ 4310).

PSYCH 4400 Cognitive Psychology (LEC 3.0)
This course covers basic cognitive processes and their application. Theory and research are presented on attention, perception, memory, problem solving, decision making and language. Prerequisite: Psych 1101.

PSYCH 4410 Neuroscience (LEC 3.0)
The neurophysiological bases of behavior and cognition are examined. Topics covered include neuroanatomy, neurotransmission, neuropsychology, brain systems, learning and memory, emotion, attention and consciousness, and neurologic/psychological disorders. Prerequisite: Psych 1101.
PSYCH 4411 Sensation and Perception (LEC 3.0)
An in-depth examination of the human senses, with special emphasis on vision and hearing. Topics include the anatomy and physiology of the eye and ear, neural transduction, the organization and interpretation of sensory signals by the brain, selective attention, and the neural basis of the perception of color, form, space, depth, motion, music, and language. Prerequisite: Psych 1101.

PSYCH 4412 Evolutionary Psychology (LEC 3.0)
Fundamental principles of evolution, and their applicability to human behavior and psychological processes are examined. Topics include interpersonal attraction, sperm competition, altruism, aggression, and creationism/intelligent design. Prerequisite: Psych 1101.

PSYCH 4500 Personality Theory (LEC 3.0)
An examination of the ways in which personality traits develop and the sources of differences among people in the traits they exhibit. The emphasis is on major theories of personality development, as well as recent research in the field. Prerequisite: Psych 1101.

PSYCH 4501 Abnormal Psychology (LEC 3.0)
An introductory study of various forms of personality and behavioral disorders. Consideration will be given to neurosis, psychosis, mental deficiency and other deviations, with emphasis on etiology and treatment. Prerequisite: Psych 1101.

PSYCH 4510 Clinical Psychology (LEC 3.0)
Comprehensive survey of the field of clinical psychology. Course will cover a variety of assessment and treatment procedures relevant to psychology and other professionals who treat human adjustment problems; techniques based on experimental outcome research and psychological testing will be emphasized. Prerequisites: Psych 1101 and Psych 4501.

PSYCH 4590 Health Psychology (LEC 3.0)
This course examines Health Psychology. Topics include basic behavioral pharmacology (including alcohol and other drugs), illusions of invulnerability to risk, stress and coping, and the science of persuading people to protect their health. Students learn how to construct a public service announcement towards a societal problem as part of the course. Prerequisite: Psych 1101.

PSYCH 4600 Social Psychology (LEC 3.0)
An exploration of the phenomena involved in human social behavior and the theories that explain them. Topics typically include social thinking, attitudes and attitude change, conformity, persuasion, interpersonal attraction, and more. Prerequisite: Psych 1101.

PSYCH 4601 Group Dynamics (LEC 3.0)
A review of the concepts and theories related to group dynamics. Topics include group goals, communication within groups, group structure, norms, leadership, decision making, controversy, conflict resolution, power, diversity issues, and team development. Prerequisite: Psych 1101.

PSYCH 4602 Organizational Psychology (LEC 3.0)
Analysis, comprehension, and prediction of human behavior in organizational settings through the scientific study of individual processes, group processes, and organizational structure and function. Prerequisite: Psych 1101.

PSYCH 4603 Social Influence: Science and Practice (LEC 3.0)
Principles and procedures that affect the process of social influence, with consideration given to attitudinal, compliance inducing, and perceptual influences. Prerequisite: Psych 1101.

PSYCH 4610 Psychology of Leadership in Organizations (LEC 3.0)
Examination of conceptual and empirical research on determinants of effective vs. ineffective leadership. Topics include leadership measurement, traits, skills, leader-member exchange, charismatic and transformational leadership, change management, team leadership, and ethical leadership. Practical guidelines for developing leadership skills are discussed. Prerequisite: Psych 1101.

PSYCH 4700 Industrial Psychology (LEC 3.0)
An overview of the field of industrial psychology including topics such as criterion development, job analysis, selection, training, performance assessment, and some human factors concerns. Prerequisite: Psych 1101.

PSYCH 4710 Human Factors (LEC 3.0)
Research, theory, and practice from psychology and other social science disciplines have implications for the effective design and use of computers in organizations. This course introduces students to the psychological issues in software engineering, technology in the workplace, and organizational design. Prerequisite: Psych 1101.

PSYCH 4720 Human-Computer Interaction (LEC 3.0)
An examination of human-machine systems and the characteristics of people that affect system performance. Topics include applied research methods, systems analysis, and the perceptual, cognitive, physical and social strengths and limitations of human beings. The focus is on user-centered design of technology, particularly in manufacturing environments. Prerequisite: Psych 1101. (Co-listed with Eng Mgt 4330).

PSYCH 4730 Environmental Psychology (LEC 3.0)
An examination of the psychological effects of various environmental designs and ways to design environments effectively. Topics include: environmental attitudes, perception, and cognition; environmental influences, crowding, and the application of environmental design principles to living, educational, work, and recreational settings. Prerequisite: Psych 1101.

PSYCH 4990 Internship (IND 0.0-6.0)
Internship will involve students applying 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. Prerequisite: Junior or Senior Psychology major; consent of instructor; must have completed 9 hours in major.

PSYCH 4992 Cross-Cultural Psychology (LEC 3.0)
Study of the impact of ethnic and national culture on psychological processes and behaviors. Topics include the effects of individualism and collectivism on patterns of socialization, personality, motivation, emotion and cognition; cultural differences in diagnosis and treatment of mental and physical health; and group and organizational behavior. Prerequisite: Psych 1101.

PSYCH 4993 Psychology of Women (LEC 3.0)
A history of the psychology of women with a focus on the latest research and theories in the field (e.g., research methods, gender theories, biological and social factors, communication and leadership styles, nature of interpersonal relationships, and health and mental issues). Prerequisite: Psych 1101.

PSYCH 4994 Psychology in Media (LEC 3.0)
Examples drawn from the media (e.g., television, movies, newspapers) will be used as the basis for discussing a wide variety of psychological phenomena, principles, and theories, and their applicability to everyday life. Prerequisite: Psych 1101.
**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 in Industrial / Organizational Psychology** (RSD 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. Prerequisite: Nine hours of psychology.

**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. Prerequisites: Psych 1101 and Psych 2200.

**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.

**PSYCH 5601 Advanced Group Dynamics** (LEC 3.0)
An in-depth review of the concepts and theories related to group dynamics. Topics include group goals, communication within groups, group structure, norms, leadership, decision making, controversy, conflict resolution, power, diversity issues, and team development. Students will consider theoretical implications and practical applications of topics in group dynamics in the form of independent reading, research proposals, and observational assignments. Prerequisite: Psych 4601 or graduate standing.

**PSYCH 5602 Organizational Processes: Research and Practice** (LEC 3.0)
Examination of the field of Organizational Psychology. An emphasis is placed on research methods and application of practices related to individual processes, group processes, organizational structure and function. Prerequisites: 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. Prerequisite: Psych 4603 or graduate standing.

**PSYCH 5700 Advanced Industrial Psychology** (LEC 3.0)
An in-depth examination of the field of industrial psychology. An emphasis is placed on research methods and application of practices related to Job Analysis, Recruitment, Selection, Training, and Performance Appraisal. 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, with a strong focus on application (e.g., environmental design, human error, safety). Prerequisite: Psych 4710 or graduate standing.

**PSYCH 5720 Advanced Human-Computer Interaction** (LEC 3.0)
This course examines the psychological research and theories that contribute to the field of human-computer interaction. An emphasis will be placed on engaging in critical evaluation of research and applying theoretical knowledge to effectively use computers in organizations. Prerequisite: Psych 4720 or graduate standing.

**PSYCH 5730 Environmental Psychology: Research and Practice** (LEC 3.0)
An in-depth review of the theoretical perspectives in environmental psychology and the psychological effects of various environments. An emphasis is placed on the review and integration of the research to explain the psychological issues related to various environments as well as to understand ways to effectively design living, educational, work, and recreational environments. Prerequisite: Psych 4730 or 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 students 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 6210 Advanced Research Methods** (LEC 3.0)
Advanced techniques class, including advanced analysis of variance, multiple regression, and partial correlation, analysis of covariance and the examination of some quasi-research designs. Prerequisites: Graduate standing.

**PSYCH 6610 Advanced Leadership Theory & Practice** (LEC 3.0)
Examination of research surrounding the major theories of leadership. Topics include leadership measurement of traits and skills, major theories of leadership including LMX, Charismatic, Transformational, and Authentic Leadership Theories. An emphasis is given on researching leadership topics and applying findings of leadership research in organizations. Prerequisite: Psych 4610 or graduate standing.

**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. (Co-listed with Eng Mgt 6112).

**PSYCH 6702 Personnel Selection** (LEC 3.0)
Developing and using assessment tools for personnel selection, classification, and promotion; measuring the impact of cultural variables on test performance; early identification of managerial potential; and emphasis on alternatives to cognitive abilities testing, including physical fitness and personality assessment. Prerequisites: Graduate standing.