

POULTRY SCIENCE

P S

College of Agriculture and  
Natural Resources

224. *Poultry Science and Practice*  
Winter, Spring. 4(3-2)

Poultry in the agricultural economy; fundamental principles of anatomy, physiology and body systems; diseases, their prevention and control; management practices and procedures in producing poultry meat and eggs.

301. *Special Problems*

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 6 credits. Approval of department.

411. *Poultry Seminar*

Fall. 1(2-0) May re-enroll for a maximum of 3 credits. Special articles and reports.

413. *Avian Nutrition*

Fall. 3(3-0) ANS 325.

Nutrient requirements. Feed ingredients. Factors affecting digestion and utilization of feed. Formulation of practical poultry feeds. Nutritional problems. Systems and practices for feeding poultry.

424. *Poultry Breeding and Incubation*

Winter of even-numbered years. 4(3-2) ANS 461.

Genetic and biological factors affecting economic characteristics including egg production, egg size, hatchability, growth and viability and factors involved in the hatching of eggs.

435. *Poultry Industry-Management and Marketing*

Spring of even-numbered years. 5(4-2) 224 or approval of department.

Practical application of economic and management principles to commercial poultry enterprises.

440. *Avian Physiology*

Spring of odd-numbered years. 4(3-3) Approval of department. Interdepartmental and administered jointly with the Physiology Department.

A survey of the systemic physiology of birds emphasizing digestion, metabolism, the endocrines, and reproduction.

488. *The Impact of Animal Resource Management Upon the World's Developing Nations*

Winter. 3(4-0)

For course description, see Interdisciplinary Courses.

800. *Advanced Poultry—Special Problems*

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

801. *Advanced Poultry Seminar*

Fall, Winter, Spring. 2 credits. May re-enroll for a maximum of 6 credits. Approval of department.

899. *Research*

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

999. *Research*

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

PSYCHIATRY

PSC

College of Human Medicine

590. *Special Problems in Psychiatry*

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Human Medicine students; graduate students with approval of department.

Each student will work under direction of a staff member on an experimental, theoretical or applied problem.

601. *Medical Psychopathology*

(508.) Fall, Winter, Spring. 1 to 3 credits. H M 501; nonmedical students: approval of instructor.

Psychiatric nosology, diagnosis and medical psychopathology. Interview technique, diagnosis of common psychiatric disorders, psychopathology and its behavior disorders encountered in the practice of medicine.

608. *Psychiatry Clerkship*

Fall, Winter, Spring. 17 credits. H M 501, primary clerkship. Approval of department.

A program designed to permit the student to become familiar with and participate in the contemporary practice of psychiatry utilizing supervised in-patient, out-patient, emergency and community mental health services.

PSYCHOLOGY

PSY

College of Human Medicine  
College of Osteopathic Medicine  
College of Social Science

107. *Motivation and University Life*

Fall, Winter, Spring. 2(2-0) For freshmen and sophomores with a 2.5 grade point average or lower; approval of department, referral by Counseling Center and approval of Department.

Seminars on topics of current interest relating psychological principles to problems of university life. Topics include behavior motivation, attitudes and values, perception of self and others, and learning processes.

160. *Introductory Psychology: Social-Personality*

Fall, Winter, Spring, Summer. 3(3-0)

The complex functioning of the individual in his social environment will be considered. Topics include: socialization, interpersonal perception, group processes, motives, emotions, attitudes, and values. Students may participate in psychological experiments outside of class.

161. *Topics in Introductory Psychology: Social-Personality*

Fall, Winter, Spring, Summer. 2(2-0) 160 must be elected concurrently.

A small-enrollment discussion class for students enrolled in 160 who are interested in discussing a particular psychological topic in depth. A number of different sections will be offered, each discussing a different topic.

170. *Introductory Psychology: General*

Fall, Winter, Spring, Summer. 4(4-0)

Principles underlying the behavior of humans and animals. Topics include: cognition, emotion, motivation, learning, sensation, and perception. Students may participate in psychological experiments outside of class.

215. *Introduction to Psychological Measurement*

Fall, Winter, Spring, Summer. 4(3-2) 160 or 170.

Psychology as a quantitative discipline; graphical presentation and interpretation; psychological data in various content fields; methods of summarizing behavioral data; samples, populations and probability in psychological research; hypothesis testing.

225. *Psychology of Personality*

Fall, Winter, Spring, Summer. 3(3-0) 160 or ED 200 or Sophomores with approval of department.

Application of psychological principles to an introductory understanding of personality and interpersonal adjustments; social motivation, frustration, conflicts, and adjustment mechanisms; theories of adjustment, the assessment of personality, problems of mental hygiene and some theories of psychotherapy.

246. *Sensitivity to Children I*

Fall. 2(2-1) Sophomore standing or three credits in psychology.

Three-term sequence emphasizes supervised weekly play with a child and analysis of videotaped recordings. Readings and discussions cover problems faced by child therapists, teachers and parents.

247. *Sensitivity to Children II*

Winter. 2(2-1) 246.

Continuation of 246.

248. *Sensitivity to Children III*

Spring. 2(2-1) 247.

Continuation of 247.

255. *Psychology of Business and Personnel*

Fall, Winter, Spring, Summer. 3(3-0)

Introductory course in psychology.

Application of psychological principles and methods to selection, placement, training, supervision, evaluation, and motivation of personnel; worker and manager efficiency; accident prevention. Introduction to problems of human relations in business and industry.

290. *Human Sexuality*

Winter. 3(1-3) Credit may not be earned in both FCS 365 and PSY 290.

Lecture and discussion of the fundamental principles of human sexuality focusing on such topics as physiology, psychological development, cultural perspectives, gender roles, premarital standards, values and human interactions.

301. *Human Learning and Memory*

Winter, Spring, Summer. 3(3-0) 170.

Concepts, procedures, issues, and principles involved in the acquisition, retention, transfer and execution of verbal learning, identification learning, and perceptual-motor skills.

302. *Human Learning and Performance*

Winter, Spring, Summer. 2(0-4) 170; 215; 301 concurrently.

Representative demonstrations, exercises, and experiments concerned with the acquisition, retention, transfer, and execution of verbal learning, identification learning, and perceptual-motor skills.

- 304. Physiological Psychology**  
Fall, Spring. 3(3-0) One course in experimental psychology; N S 193.  
Physiological mechanisms underlying basic behavioral processes, including sensation, emotion, motivation and learning.
- 310. Sensation and Perception**  
Fall, Winter, Spring. Summer of even-numbered years. 3(3-0) 170, 215; 311 concurrently.  
Concepts, issues and principles in the areas of sensation and perception.
- 311. Experimental Psychology: Sensation and Perception**  
Fall, Winter, Spring. Summer of even-numbered years. 2(0-4) 170, 215; 310 concurrently.  
Representative experiments and demonstrations in the areas of sensation and perception.
- 312. Learning and Motivation**  
Fall, Winter, Spring. Summer of odd-numbered years. 3(3-0) 170, 215; 313 concurrently.  
Detailed analysis of basic conditioning processes such as reinforcement, discrimination, generalization, punishment, aversive behavior, and theories of learning. Emphasis on infrahuman data, but applications to human behavioral modification are considered.
- 313. Experimental Psychology: Learning and Motivation**  
Fall, Winter, Spring. Summer of odd-numbered years. 3(0-4) 170, 215; 312 concurrently.  
Representative experiments in operant behavior, including an individual project selected by the student, using the pigeon as the laboratory animal.
- 315. Psychometric Methods**  
Fall, Winter, Spring. Summer. 3(2-2) 215 or approval of department.  
Applications of statistical methods and techniques to psychological data in relation to theories, hypotheses, assumptions and interpretation.
- 325. Traits and Abilities**  
Spring. 3(3-0) 215.  
Ways in which individuals differ in personality: theories, methods, and techniques for understanding and studying personality organization and structure in relation to causation and prediction.
- 335. Principles of Social Psychology**  
Fall, Winter, Spring, Summer. 4(4-0) 160. Students may not earn credit in both 335 and SOC 351.  
A critical survey of social psychology with emphasis on psychological principles underlying social behavior. Topics include social perception; motivation; attitudes and attitude change; social interaction in small groups and in large-scale organizations.
- 336. Psychology of Social Movements**  
Fall, Spring. 3(3-0).  
Psychology of political, religious, and other social movements: group identifications and affiliation, socialization, conversion, and defection; the perception of social movements by members; influences of motivation and personality on ideologies and social movements.
- 337. Legal and Criminal Psychology**  
Fall, Winter, Spring. 3(3-0) 160 or ED 200.  
Application of psychological principles, methods and techniques to legal and criminal problems and procedures, including the formation, detection, prevention, and rehabilitation of criminal behavior, testimony, legal arguments, trial tactics and the other courtroom procedures.
- 345. Child Psychology**  
Fall, Winter, Spring, Summer. 4(4-0) 160, 170.  
Psychological development of the child; genetic, prenatal and postnatal influences; infancy, pre-school and school age periods; relations with parents and peers; social, emotional and intellectual development.
- 346. Middle Childhood**  
Winter. 3(3-0) 345 or FCS 362A.  
Emotional, social and intellectual development of school-age child with special emphasis on adjustment to school, peer group, family and community. School achievement, sex education, self-concept, social attitudes, preadolescence.
- 348. Adolescent Psychology**  
Winter, Spring, Summer. 3(3-0) 345.  
Continuation of 345 covering development and maturation during adolescence, with emphasis on problems of the adolescent's adjustment to his personal and social environment.
- 356. Psychology of Human Relations in Work Setting**  
Fall, Winter, Spring. 3(3-0) 255.  
Preventing and solving problems among individuals and groups in work organizations; psychological and legalistic approaches compared; illustrations mainly from United States but also from other cultures as appropriate.
- 357. Psychology of Advertising and Selling**  
Winter, Spring. 3(3-0) An introductory course in psychology.  
Psychological principles, concepts, methods, and results in advertising and selling, "motivation and perception" research.
- 390H. Honors Seminar**  
(300H.) Fall. 3(3-0) Juniors or approval of department.  
History, theory and current research in selected areas for the preparation of a senior honors paper.
- 400H. Honors Work**  
Fall, Winter, Spring, Summer. 3 to 5 credits. May re-enroll for 4 terms. Approval of department.  
Seminars in advanced psychological topics, including both factual data and theoretical concepts. Topics include perception, learning, motivation and personality.
- 401. Experimental Psychology: Perception**  
Winter. 4(2-4) 215, 310, 311.  
Critical examination of problems, principles, methods, techniques, materials, results and conclusions in relation to theory in studies of perception, including experimentation and demonstrations.
- 403. Experimental Psychology: Human Learning**  
Fall, Winter, Spring. 4(3-2) 215; 302 or approval of department.  
Critical examination of problems, principles, methods, techniques, materials, results and conclusions in relation to theory in studies of human learning, including experimentation and demonstrations.
- 404. Experimental Psychology: Problem Solving**  
Spring. 4(2-4) 215; 311 or 313, or approval of department.  
Investigations of problem solving, concept formation and judgement; class and individual experiments.
- 405. Modern Viewpoints in Psychology**  
Fall, Winter, Spring. 4(4-0) 310 or 312.  
Survey of psychological systems in the modern era including behaviorism, Gestalt psychology, psychoanalysis, neo-behaviorism in relation to other selected disciplines.
- 406. Psycho-ethology**  
Spring. 4(4-0) Six credits of psychology or ZOL 412 or 413.  
Comparative and ethological methods and their application to behavior with emphasis on animals other than humans. Review of research on innate behavior, early experience, learning, motivation, and physiological processes.
- 414. Psychology of Language Behavior**  
Fall, Spring. 4(3-2) 310 or 312.  
Psychological processes underlying meaning, control of verbal behavior, language learning in children and adults, bilingualism, verbal aptitude, and verbal habits in learning and perception.
- 415. Psychological Tests and Measurements**  
Fall, Winter, Spring. 5(4-2) 215.  
Survey of methods, techniques and instruments for measuring individual differences in behavior: some representative methods of test construction, a critical analysis of representative test, criteria for evaluating and selecting tests, values and limitations of tests, laboratory experience with tests.
- 425. Abnormal Psychology**  
Fall, Winter, Spring, Summer. 4(4-0) 225.  
Nature of abnormal behavior and its social significance: description of symptoms and dynamics of psychological disorders; the neuroses and psychosomatic reactions, sociopathic behavior and character disorders, functional and somatogenic psychoses; some consideration of therapies and theories of prevention.
- 426. Survey of Clinical Psychology**  
Fall, Winter, Spring, Summer. 3(3-0) 225.  
Clinical psychology; types of problems; diagnostic instruments, methods and techniques; individual and group therapeutic theories, methods and techniques; professional roles for clinical psychologist.
- 427. Personality: Dynamic Theories**  
Fall, Winter, Spring. 3(3-0) 425.  
Survey of personality theories of development, structure, and dynamics related to learning, determinants, cultural influences, behavioral disorders and assessment methods.
- 428. Psychology of Physical Disability**  
Spring. 3(3-0) 425.  
Psychological problems, principles and practices in physical disabilities and handicaps; psychological assessment and diagnosis; counseling and placement; re-education and retraining; attitudes, motivations, and emotion; psychological rehabilitation and adjustment.
- 430. Experimental Psychology: Personality**  
Fall, Winter, Spring. 3(3-0) 215; 310 or 312.  
Critical survey of experimental investigations of

personality dynamics and the effects of individual differences on social interaction; consideration of stress and anxiety, response set, cognitive styles, risk taking and subjective probabilities, and aggression. Emphasizes experimental techniques most relevant for those with clinical and social psychological interests.

**431. Experimental Psychology:  
Personality**

Fall, Winter, Spring. 2(0-4) 215; 311 or 313; 430 concurrently.

A laboratory course coordinated with PSY 430, with laboratory demonstration and experiments, conducted by the students, designed to clarify issues in the experimental study of personality, and to provide experience with a variety of investigatory techniques.

**436. Psychology of Communication  
and Persuasion**

Fall, Spring. 3(3-0) 335 or SOC 351.

Psychological processes underlying communication and persuasion; learning and using communication in interpersonal relations; effects of communication themes, techniques, symbols, and formats on thought, attitude, and personality of audiences.

**437. Psychology of Political Behavior**

Winter. 3(3-0) 335 or SOC 351 or 6 credits in sociology or political science.

Psychological theories, principles, methods and techniques applied to political behavior; belief systems; personality influences; decision making, psychological patterns in legislative voting; political leadership; interpersonal and international relations and tensions.

**438. Research Methods in Social  
Psychology**

Fall, Winter, Spring. 4(2-4) 215; 335 or SOC 351; 1 course in experimental psychology.

Critical examination of problems, principles, methods, techniques, materials, results and conclusions in relation to theory in social psychology, including experimentation and demonstration.

**445. Psychology of Exceptional  
Children**

Fall, Summer. 3(3-0) Nine credits in psychology and/or education including at least 2 courses in child behavior.

Psychological problems of children having superior or inferior intellectual ability; examination of research studies. Identifying such persons, assessing their potentials and limitations, planning their education and social adjustment.

**446. Child Psychology: Research  
Methods**

Fall, Spring. 4(2-4) 215, 345; 311 or 313.

Methods of research in developmental psychology on selected topics such as: perception, learning, language, and social behavior.

**455. Personnel Research Techniques**

Fall, Spring. 4(3-2) 215, 255. Quantitative psychological research technique applied to typical personnel problems in industry and government.

**456. Training and Supervising**

Spring. 3(3-0) 356. Psychological principles and methods applied to training workers, supervisors, and executives in business, industrial, and governmental organizations.

**457. Personnel Interviewing**

Winter. 3(3-0) 356 and 415 or 455. Development of interviewing skills for business,

industry and government situations. Integration of interview and test finding. Review of pertinent research methods and findings.

**486. Psychology of Music**

Fall, Summer. 3(3-0) Approval of department. Interdepartmental with the Music Department.

Musical behavior with emphasis on psychological aspects of perception, learning, affective response, and ability. Emphasis on social and cultural influences in forming musical tastes, including mass media music.

**487. Psychology of Music**

Winter, Summer. 3(2-2) 486. Interdepartmental with the Music Department.

Basic research concepts and experimental methods in psychology of music research. Practical training in conducting experimental research of musical behavior.

**489. Humanistic Psychology**

Fall, Spring. 4(4-0) Seniors.

Subject matter is drawn from the psychology of personality in its various forms. The usual approaches of the behavioral sciences are subject to critical analysis. One goal is to derive some elements of a philosophy of life for man as a potentially rational and ethical being.

**490. Special Problems in Psychology**

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Approval of department.

Each student will work under direction of a staff member on an experimental, theoretical, or applied problem.

**499H. Senior Project**

Fall, Winter, Spring. 3(0-6) May re-enroll for a maximum of 6 credits. 390H or approval of department.

Independent research involving literature survey, naturalistic observation, or experimental investigation with staff supervision. Preparation of the Senior paper.

**800. Conditioning and Learning**

Fall. 4(3-0)

Detailed stimulus-response analysis of the basic operations of conditioning and learning, including such variables as reinforcement, motivation, and inhibitory effects, with an emphasis on infrahuman data.

**801. Perception**

Fall. 4(3-0) Majors or approval of department.

Consideration in depth of selected topics in perception. Intergration of theoretical and empirical material.

**802. Advanced Experimental  
Psychology: Comparative**

Spring. 4(2-4) One course in experimental psychology and 315.

Critical examination of theories and data relating particularly to behaviors of sub-humans. Experimentation on selected topics in the area.

**803. Seminar in Industrial Relations**

For course description, see Interdisciplinary Courses.

**806. Advanced Comparative  
Psychology**

Fall. 4(3-0) Majors or approval of department.

Behavior of infrahuman organisms with emphasis on general behavior processes as seen in a variety of animal forms. The comparative method as applied to innate behavior and behavior modification.

**808. Cognitive Processes**

Fall, Spring. 4(3-0) A course in experimental psychology.

Critical survey of theories and research on such topics as problem solving, creative thinking, reasoning, judgement, decision making, formation and use of concepts and principles.

**810. Human Learning and  
Performance**

Spring. 4(3-0) Majors or approval of department.

Experimental findings and theoretical analyses of the acquisition, retention, transfer and execution of verbal materials and perceptual-motor skills. Selected demonstrations of major phenomena.

**811. Advanced Physiological  
Psychology**

Spring. 4(3-0) Majors or approval of department.

Psychology as a biological science. Consideration of physiological events underlying organism-environment interaction.

**814. Psychology of Language**

Spring. 4(3-0)

Critical survey of research on language acquisition, utilization, and modification; psycholinguistic considerations in study of learning, perception, motivation, and cognitive processes.

**815. Advanced Psychometrics**

Fall, Winter. 4(4-0) 315.

Theory and practice in analysis and interpretation of psychological data.

**816. Advanced Psychometrics**

Winter, Spring. 4(4-0) 815.

Continuation of 815.

**817. Advanced Psychometrics**

Spring. 4(4-0) 816.

Multivariate methods of test analysis: multiple and partial correlation, factor and pattern analysis.

**818. Test Construction**

Winter of odd-numbered years. 3(3-0)

816.

Theory, methods, and techniques in the preparation and development of psychological test items and tests.

**820. Mathematical Models in  
Psychology I**

Fall. 4(4-0) 815 and MTH 227.

Discussion of the relationship between mathematics and psychological theory. Examination of the concepts of structure and change in qualitative psychological systems. Application of algebraic techniques to psychological theory.

**821. Mathematical Models in  
Psychology II**

Winter. 4(4-0) 816, 820; approval of department.

Representative mathematical models in psychology, attending particularly to stochastic models and the relationship between models and data. Advantages of various models for different psychological problems.

**822. Computer Models in Psychology**

Spring. 4(3-2) An undergraduate mathematics course and approval of department.

Use of an electronic computer as a tool in theory construction. Simulation of complex psychological processes. Computer-based models in several psychological content areas.

- 826. Advanced Personality Research**  
Fall, Winter. 4(4-0) May re-enroll for a maximum of 8 credits if different topics are taken. Majors or approval of department.  
Review of current research in selected areas. A minimum of four topics will be covered each term.
- 827. Personality Theory I**  
Fall. 4(3-0) Majors or approval of department.  
Freudian and neo-Freudian conceptualizations of personality and psychopathology. Examination of basic constructs; theory of psychosexual development; psychotherapeutic implications.
- 828. Clinical Assessment I**  
Fall. 2(0-4) Majors or approval of department.  
Assessment of psychodynamics and psychopathology. Individual case studies based on interviews and psychological tests. Behavioral correlates of psychodynamic problems.
- 829. Personality Theory II**  
Winter. 4(3-0) Majors or approval of department.  
Developmental and social-learning approaches to personality and psychopathology; social learning and psychodynamics, socialization, maturational theories, applications of classical and operant conditioning. Psychotherapeutic implications.
- 830. Clinical Assessment II**  
Winter. 2(0-4) 828 or approval of department.  
Clinical assessment of children. Individual case studies making systematic use of behavior observations, interviews, and standardized tests. Integration of data and principles of development of new assessment procedures.
- 831. Personality Theory III**  
Spring. 4(3-0) Majors or approval of department.  
Interpersonal and phenomenological approaches to personality theory. Survey of major conceptualizations and principles relating to the presentation of self in individual and group settings. Psychotherapeutic implications.
- 832. Clinical Assessment III**  
Spring. 2(0-4) 830 or approval of department.  
Self-appraisal and investigation of interpersonal transactions in two-person and larger groups. Standardized techniques, individual case studies, and principles of development of new methods.
- 835. Experimental Psychology: Social**  
Fall. 4(2-4) One course in experimental psychology and 315.  
Intensive experience in designing, executing, reporting and evaluating research in social psychology, including an individual research project.
- 837. Psychological Aspects of Politics**  
Fall, Winter, Spring. 4(3-0) Inter-departmental with and administered by the Political Science Department.  
Relevance of psychological concepts, theories and methods for the study of political institutions, organizations and behavior.
- 840. Advanced Social Psychology: Cognitive Approaches**  
Winter. 4(3-0) 815; 20 credits in the social sciences.  
Contemporary theory and research in social psychology dealing with attitude organization and cognition, values, attitudes and behavior, attitude change and balance theories.
- 841. Advanced Social Psychology: Group Processes**  
Spring. 4(4-0) 815; 20 credits in social sciences.  
Contemporary theory and research dealing with the individual in a group context.
- 845. Infancy and Early Childhood**  
Spring. 4(3-1) Majors or approval of department.  
Human infancy: conception to three years. Developmental study of: prenatal life, personality, learning, perception, sensory stimulation and deprivation, neurophysiology, psychophysiology, language and cognition.
- 846. Advanced Child Psychology**  
Fall, Spring. 4(3-0)  
Psychological theories and research methods and findings related to the intellectual, emotional, perceptual, social and personality development of the child.
- 855. Engineering Psychology: Individual Man-Machine Behavior**  
Winter. 4(2-0)  
Behavior of individuals operating equipment; effects of control and display design, cockpit layout, legibility, physical dimensions; principles for reducing errors; applications to aerospace, military, highway, industrial, and other problems.
- 859. Personnel Development**  
Spring. 4(2-0) Fifteen graduate credits.  
Psychological principles and methods in the training and development of personnel at all levels of supervision and leadership.
- 860. Advanced Industrial Psychology**  
Fall. 4(3-0) A course in statistics and 20 credits in the social sciences.  
Industrial psychology, including such sub-areas as personnel psychology, human factors, and industrial social psychology.
- 862. Organizational Psychology**  
Winter. 4(2-0) Fifteen graduate credits.  
Survey of current theories of individual behavior in complex organizations. Examples from research in industry, government, and other complex organizations.
- 866. Personnel Selection and Evaluation**  
Fall. 4(2-0) Fifteen graduate credits.  
Critical treatment of research methods and instruments in personnel selection and evaluation as applied to governmental, business and industrial situations.
- 867. Field Training in Industrial Psychology**  
Fall, Winter, Spring. Variable credit.  
Provides field experience in selected companies to familiarize students with problems and to give training in consulting and research.
- 868. Psychological Theory and Research in Advertising**  
Winter. 4(2-0) Ten graduate credits.  
Survey and integration of psychological theory and research in advertising in such areas as: motivation, perception, psychophysiology.
- 870. Introduction to Research Methods in Ecological Psychology**  
Spring. 4(4-0) 815, 816, 817 or approval of department.  
What and why of experimental ecological psychology; planning, action, evaluation, dissemination of information. Researchable problems, funding, dynamics of research teams, identifying ecological variables. Class work and community research.
- 871. Advanced Research Methods in Ecological Psychology**  
Fall. 4(4-0) 870.  
Applications of ecological psychology; measurement; hypotheses and research plans; initiating, maintaining, terminating naturalistic psychological research; evaluating and publishing results. Review of selected experiments. Class work plus research in community.
- 872. Experimental Production of Social Change**  
Winter. 4(4-0) 870, 871.  
Use of psychological research to produce social change. Creation of acceptance of social change. Examination of effectiveness of experimental intervention into social systems. Class work plus community research.
- 890. Special Problems**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
- 899. Research**  
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
- 901. Psychological Research Methods**  
Fall. 3(3-0) One graduate course in experimental psychology and 816.  
Nature, design and critique of research; theory and interpretation of results; analysis of published research and student results.
- 902. Special Research Techniques**  
Fall, Winter, Spring. 1 to 4 credits  
May re-enroll for a maximum of 12 credits. Graduate students and approval of department.
- 902A. Laboratory in Advanced Physiological Psychology I**  
Fall. 5(2-4) Graduate students and approval of department.  
Physiological mechanisms underlying behavior. Development of skills in the methods, techniques, and instrumentation necessary for research in a variety of areas concerned with physiology and behavior with special emphasis on ablative procedures.
- 902B. Laboratory in Advanced Physiological Psychology II**  
Winter. 5(2-4) 902A.  
Detailed examination of the physiological mechanisms underlying behavior. Development of skills in the methods, techniques, and instrumentation necessary for research in a variety of areas concerned with physiology and behavior with special emphasis on electrical stimulation and recording.
- 905. History and Systems**  
Winter. 4(3-0) Thirty graduate credits in psychology.  
Major scientific, cultural, philosophical, and personal influences in the development of psychology. Analysis of persisting issues.

**914. Seminar in Advanced General Psychology**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll in different areas for a maximum of 24 credits. Thirty graduate credits in psychology or approval of department.

Critical study of a selected area such as sensation, perception, motivation, emotions, learning, physiological, comparative, thought and language.

**924. Seminar in Measurement**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll in different areas for a maximum of 16 credits. Thirty graduate credits with 15 of them in psychology.

Critical study of a selected area such as factor analysis, pattern analysis, partial and multiple correlational analysis, psychophysical methods, scaling, reliability and validity, and factorial designs.

**926. Personality Measurement I: Free Response Techniques**

Fall. 4(3-1) Thirty graduate credits in psychology, including 815 and 826.

Development, validation, and other characteristics of selected free response measures; use in current personality research.

**927. Personality Measurement II: Structured Measures and Measures of Overt Behavior**

Spring. 4(3-1) Thirty graduate credits in psychology, including 815 and 826.

Structured questionnaires and behavioral measures as tools in personality research. Development and characteristics of existing and new instruments.

**928. Practicum: Psychological Clinic I**

Fall. 3(2-2) Approval of department.

Introduction to clinical evaluation and treatment. Supervised experience in psychodiagnosis and psychotherapy of adults and children in the Psychological Clinic. Primary focus on work with families. Didactic seminar in related theory and research.

**930. Practicum: Psychological Clinic II**

Winter. 3(2-2) 928.

Continuation of 928.

**932. Practicum: Psychological Clinic III**

Spring. 3(0-6) 930.

Continuation of 930.

**934. Seminar in Personality**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll in different areas for a maximum of 16 credits. Thirty graduate credits with 15 of them in psychology.

Clinical study of a selected area such as theory, assessments, dynamics, structure, the self and determinants.

**935. Contemporary Theory and Research in Social Psychology**

Fall. 3(2-0) Thirty graduate credits in psychology.

An intensive analysis of contemporary social psychological research monographs illustrating theoretical and methodological positions.

**936. Attitudes and Personality**

Winter. 3(2-0) Thirty graduate credits.

Review and analysis of research on sentiments, beliefs and opinions, authoritarianism, pseudo-

authoritarianism, and democratic personality; functions, resistance to change and relation to value systems and ideology.

**937. Individual Behavior and Complex Groups**

Spring. 3(2-0) Thirty graduate credits.

Problems of research design and experimental method in the study of the relationship of the individual to the complex organization.

**944. Seminar in Social Psychology**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll in different areas for a maximum of 16 credits. Thirty graduate credits or approval of department.

Critical study of a selected area such as roles, communication and persuasion, individual interaction within small and large groups, behavior in relation to norms and interpersonal distances.

**954. Seminar in Developmental Psychology**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll for a maximum of 16 credits in different areas. Thirty graduate credits, 3 of which must be in child psychology.

Critical study of a selected area such as theory, techniques and methods of observation, parental attitudes and practices, intellectual, personal and social development, motivational, emotional, perceptual, and intellectual issues.

**956. Engineering Psychology: Systems Approach**

Spring. 4(2-0)

Human factors in "system" operation; sub-systems, analysis methods, criteria, information processing, communication, trade-offs; application to aerospace, military, highway, industrial, and other problems.

**969. Seminar in Industrial Psychology**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll in different areas for a maximum of 16 credits. Thirty graduate credits including 15 in psychology.

Critical study of a selected area such as interpersonal relations in industry, personnel selection, evaluation and classification, training, leadership, supervision, motivation of workers, safety engineering psychology and contemporary literature.

**973. Rorschach Method**

Winter. 4(4-0) 832.

History and hypotheses of the method. Review of research. Administration and scoring of the test. Introduction to interpretation.

**975. Advanced Practicum: Psychological Clinic**

Fall, Winter, Spring. Variable credit. 932.

Clinical experience in assuming responsibility for total case integration and interpretation of findings to parents and agencies.

**976. Psychopathology: Psychoanalytic Theory, Neuroses and Psychosomatics**

Fall. 3(3-0) 427, 832.

Kraepelinian, Pavlovian, and Freudian traditions in abnormal psychology and psychiatry. Psychoneuroses and psychosomatics with major emphasis in psychoanalytic approaches. Research and problems. Psychogenic and somatogenic positions in psychopathology.

**977. Psychopathology: Psychoses and Developmental Disorders**

Winter. 3(3-0) 976.

Behavioral and development disorders such as

psychopathy, delinquency, mental deficiencies; selected functional and organic psychotic syndromes; psychosis as distinguished from psychoneurosis; continuity versus discontinuity of normal to abnormal behavior. Research considerations.

**979. Counseling and Psychotherapy**

Fall. 3(2-2) Approval of department.

Psychotherapy with late adolescents and adults. Various points of view with emphasis on interpersonal relationship and client-centered approaches. Techniques for introducing therapeutic movement. Study of tape recordings and research findings.

**980. Practicum: Individual Counseling and Psychotherapy**

Winter. 3(2-2) 979 and approval of department.

Detailed study of psychotherapeutic interviews aimed at developing skill as a psychotherapist. Therapeutic and assessment techniques, interview dynamics and psychotherapeutic movement studied by means of verbatim transcriptions, tape recordings, films, role playing, and observation.

**981. Practicum: Counseling and Psychotherapy**

Spring. 3(0-6) 980 and approval of department.

Counseling with a variety of clients at the University Counseling Center. Group and individual discussions of problems, processes, counselor-client interaction, and professional ethics.

**982. Advanced Practicum: Counseling and Psychotherapy**

Fall, Winter, Spring. Variable credit.

981.

Counseling and psychotherapy with a variety of clients of the University Counseling Center.

**983. Child Psychotherapy**

Fall. 2 to 4 credits. 981.

Dynamic process underlying therapy with children; methods and techniques; the child's symbolic communications through language, art, and play materials; assessing progress of therapy; review of research. Practicum cases.

**984. Group Psychotherapy**

Spring. 3(2-2) 981.

Research-oriented treatment of the theories, principles and techniques in group psychotherapy. Role of the leader, problems of member selection and evaluation of progress. Limited, supervised experience as a group participant.

**985. Seminar in Clinical Psychology**

Fall, Winter, Spring. 1 to 4 credits.  
May re-enroll in different areas for a maximum of 16 credits. Forty-five graduate credits in psychology.

Critical study of a selected area such as theories, diagnosis, projective techniques, psychotherapies, hypnosis, psychopathologies.

**999. Research**

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

**RELIGION**

**REL**

**College of Arts and Letters**

**100. Introduction to Christianity**

Fall, Winter, Spring. 3(3-0)

An introduction to the study of religion through a nonnormative systematic description of the