

1DC. The Impact of Animal Resource Management Upon the World's Developing Nations
For course description, see Interdisciplinary Courses.

800. Advanced Poultry-Special Problems
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
Studies in any of the following: avian genetics, management, nutrition, physiology, other areas of poultry science.

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
College of Osteopathic Medicine**

520. Introduction to Psychiatry
Winter. 2(2-0) Admission to a college of medicine or approval of instructor.
Discrimination between various concepts of normality, understanding of psychological mechanisms, making observations and inference generation, recognition of normative crises and the psychiatric examination will be taught through lectures and discussions.

521. Basic Psychopathology I
Spring, Summer. 1(1-0) 520 or concurrently.
Recognition, description, and treatment of most psychopathologic states will be taught using lectures, audio-visual presentations, and group discussions.

522. Basic Psychopathology II
Spring, Summer. 2(2-0) 521 or concurrently.
Continuation of 521.

533. Fundamentals of Personality Dysfunction
Winter. 2(2-0) Admission to a college of medicine and approval of department; H M 514 concurrently.
Characteristic patterns of behavior, symptomatology, treatment and prognosis of common psychiatric disorders and disturbed patterns of personality function.

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.

608. Psychiatry Clerkship
Fall, Winter, Spring, Summer. 2 to 12 credits. Admission to a college of medicine; grade P in all courses in terms 1 through 8 for college of osteopathic medicine students.

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**

139. Psychology of Women
Winter, Spring. 3(3-0) Primarily for Freshmen and Sophomores.

Psychological development of sex-typed behavior and sex differences in cognitive and personality functioning; reproductive behavior; impact of social expectations on self-concept, achievement and affiliation orientations, and life decisions.

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.

209. Elements of Physiological Psychology
Fall, Winter. 3(3-0) 160 or 170.
Fundamentals of modern biological psychology. Emphasis on information essential for study of physiological correlates of perception, motivation, learning, emotion and development.

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.

244. Developmental Psychology: Infancy through Childhood
(245.) Fall, Winter, Spring, Summer. 4(4-0) 160 or 170, ED 200.

Developmental psychology of the infant and child including biological, social, cognitive, moral, perceptual and cultural development: relations with caregivers and peers as well as development of individual characteristics.

246. Sensitivity to Children I
Fall. 3(2-2) To receive credit 246, 247, and 248 must be completed satisfactorily except by prior arrangement with instructor. Sophomores and 3 credits in psychology; not open to Seniors.

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. 3(2-2) To receive credit 246, 247, and 248 must be completed satisfactorily except by prior arrangement with instructor. 246.

Continuation of 246.

248. Sensitivity to Children III
Spring 3(2-2) To receive credit 246, 247, and 248 must be completed satisfactorily. 247.

Continuation of 247.

255. Organizational and Personnel Psychology
Fall, Winter, Spring, Summer. 3(3-0) Introductory course in psychology.
The psychology of managing and leading, personnel operations, and the humanizing of work organizations.

290. Human Sexuality
Winter, Spring. 3(3-0) Credit may not be earned in both FCS 465 and PSY 290. Sophomores.
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. 4(4-0) 170 or 215.
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
Fall, Spring. 2(0-4) 215; 301.

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

308. Psychology of Thinking
Winter. 3(3-0) 170, or ED 200, 215; one additional course in experimental psychology recommended.

Principal concepts, theories and research on cognitive process and thinking, including problem solving, creative and critical thinking, reasoning, and concept formation. Experimental analysis, individual differences and information-processing approaches.

309. Physiological Psychology
(304.) Fall, Winter, Spring. 3(3-0) 209 or an elementary course in zoology, biology or physiology.

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.

**Descriptions — Psychology
of
Courses**

- 311. Experimental Psychology: Sensation and Perception**
Fall, Winter, Spring, Summer of even-numbered years. 3(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.
- 335. Principles of Social Psychology**
Fall, Winter, Spring, Summer. 4(4-0) 160. Students may not earn credit in both 335 and SOC 251.
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.
- 344. Developmental Psychology: Adolescence and Youth**
(348.) Winter, Spring, Summer. 3(3-0) 244.
Continuation of 244 covering development during adolescence and youth with emphasis on problems of identity and adjustment to the social environment.
- 356. Psychology of Human Relations in Work Setting**
Fall, Winter, Spring. 3(3-0) An introductory course in psychology and 255 or MGT 310. Students may not earn credit in both 356 and MGT 414.
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.
Psychology underlying techniques of effective advertising, selling, and marketing and, at the same time, psychology relevant to living in a marketing-oriented culture.
- 370. Psychology and Social Innovation**
Winter. 3(3-0) A social science research methods course or approval of department.
Planning, implementing and evaluating experimental approaches to social problems. Topics include: adoption of innovations; field research problems; science and policy formation; parameters of program evaluations.
- 390H. Honors Seminar**
Fall, Winter, Spring. 1 to 5 credits. May re-enroll for a maximum of 15 credits when different topics are offered. Honors students and approval of department.
History, theory, and current research in selected areas of psychology, including personality, motivation, perception, learning, industrial, ecological, mathematical, developmental, social, and clinical.
- 400. Selected Topics in Psychology**
(400H.) Fall, Winter, Spring, Summer. 2(2-0) to 5(5-0) May re-enroll for a maximum of 12 credits. Approval of department.
Selected topics in the areas of experimental, developmental, social, industrial, personality, mathematical, ecological, or clinical psychology.
- 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**
Winter. 4(4-0) 215; 302 or 313 or approval of department.
Application of principles of learning and motivation to humans of various ages and abilities in educational and noneducational settings. Some application to animal behavior. Extended practicum (490-491) may be taken concurrently to complete appropriate projects.
- 404. Experimental Psychology: Problem Solving**
Spring. 4(2-4) 215 and 308, 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.
- 409. Advanced Concepts in Physiological Psychology**
Fall, Winter, Spring. 4(4-0) 309 or approval of department.
Detailed analysis of advanced concepts in physiological psychology, such as vision, audition, somatic sensation, chemical senses, motivation, emotion, perception, arousal, learning, and the influence of hormones on behavior.
- 414. Psycholinguistics**
Fall, Spring. 4(4-0) 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(5-0) 215.
Methods, techniques, and instruments for measuring individual differences in behavior. Standard methods of construction, critical analysis of representative tests, criteria for evaluating and selecting tests, values and limitations of 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**
Spring. 3(3-0) 215.
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**
Spring. 2(0-4) 215, 430 or 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 251.

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
Fall, Winter, Spring. 3(3-0) 335 or SOC 251 or 6 credits in sociology or political science. Interdepartmental with the Department of 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 251; 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.

439. Selected Topics in the Psychology of Women

Fall, Spring. 3(3-0) May re-enroll for a maximum of 9 credits when different topics are offered. Nine credits in psychology or approval of department.

Selected topics: e.g., achievement and affiliation behavior; sex-typed behavior and identity; political socialization of women; personality perspectives; psychohistory of women; professional and traditional orientations; third world women.

444. Advanced Developmental Psychology

A. SOCIAL DEVELOPMENT

Fall. 4(4-0) 160, 170, 215, 244 or approval of department.

Theories and recent research in social development of infants, children, and adolescents.

B. COGNITIVE DEVELOPMENT

Winter. 4(4-0) 160, 170, 244 or approval of department.

Recent approaches to cognitive development. A view of selected theories and experiments.

C. LANGUAGE DEVELOPMENT

Spring. 4(4-0) 160, 170, 244 or approval of department.

Psychological theories and experiments in the development of language in the child, including both social and cognitive effects of language development.

D. APPLIED DEVELOPMENT

Fall, Summer. 4(4-0) 160, 170, 244 or approval of department.

Selected behavior problems in development. Topics may include: child psychopathology, physical and emotional disabilities, speech disorders, cognitive-intellectual deficits.

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. Personnel Training and Development

Spring. 4(4-0) 356 or MGT 414.

Each student develops skills called for in training work-level employees, supervisors and managers in industry, business, and government—all in an organization development frame of reference. Relevant research reviewed.

457. Personnel Interviewing

Winter. 4(4-0) 356 or MGT 414.

Each student develops skills called for in interviewing in industry, business, and government. The training and management of interviewers. Relevant research reviewed.

485. Psychology of Love and Maturity

Fall, Winter. 4(4-0) Juniors and 3 courses in psychology.

The function of love in human existence. Varieties of love; their effect upon the growth of the person in terms of awareness, integration, authenticity, social concern and responsibility, maturity and fulfillment.

486. Psychology of Music

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

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 Department of Music.

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) 485.

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. Combined credits in 490 and 491 may not exceed 12. Approval of department.

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

491. Participation in Psychological Projects

Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits. Combined credits in 490 and 491 may not exceed 12. Approval of department.

Each student will participate in a psychological project under direction of a staff member.

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.

IDC. Seminar in Industrial Relations
For course description, see Interdisciplinary Courses.

805. History and Systems

(905.) Fall of even-numbered years. 4(3-0) Psychology majors or approval of department.

Major scientific, cultural, philosophical, and personal influences in the development of psychology. Analysis of persisting issues.

806. Advanced Comparative Psychology

Fall of odd-numbered years. 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

Spring of even-numbered years. 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) A course in statistical inference; majors or approval of department.

Theory and practice in analysis and interpretation of psychological data.

816. Advanced Psychometrics

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

Continuation of 815.

**Descriptions — Psychology
of
Courses**

- 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. 4(4-0) 817.
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) MTH 111 and STT 201 or approval of department.
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 of even-numbered years. 4(4-0) 820 or 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 of even-numbered years. 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.
- 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.
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) Interdepartmental with and administered by the Department of Political Science.
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. Developmental Psychology: Infancy**
Fall. 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. Developmental Psychology: Childhood**
Winter. 4(4-0) Majors or approval of department.
Psychological theories and research methods and findings related to the intellectual, emotional, perceptual, social and personality development of the child.
- 847. Developmental Psychology: Adolescence and Youth**
Spring. 3(3-0) Majors or approval of department.
Psychological theories and research methods and findings related to the intellectual, emotional, perceptual, social and personality development of the adolescent and young adult.
- 859. Personnel Development**
Spring. 4(2-2) Fifteen graduate credits.
Psychological principles in the training and development of personnel at all organizational levels with special attention devoted to managerial leadership.
- 860. Advanced Industrial Psychology**
Fall. 4(3-0) Twenty credits in the behavioral sciences or organizational behavior, and a course in statistics.
Industrial and organizational psychology as a science and as a profession.
- 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.
- 865. Advanced Neurobiology**
Spring. 3(3-0) BPY 825. Interdepartmental with the departments of Biophysics, Biomechanics, Physiology and Zoology and administered by the Department of Biomechanics.
Basic organization, structure and function of neural networks comprising sensory, motor, and autonomic systems including examples from invertebrates and vertebrates.
- 866. Personnel Selection and Evaluation**
Fall of even-numbered years. 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.
Fifteen graduate credits in organizational behavior courses and approval of instructor.
Field experience in selected companies to provide students with training in consulting and research on organizational problems.
- 868. Psychological Theory and Research in Advertising**
Winter of odd-numbered years. 4(2-0) Ten graduate credits.
Psychological theory and supporting research in advertising and other closely related efforts to persuade and influence marketing situations.
- 870. Introduction to Research Methods in Ecological Psychology**
Fall. 4(4-0) 815 concurrently 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**
Winter. 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**
Spring. 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.
- 885. Vertebrate Neural Systems I**
Fall of odd-numbered years. 5(3-4) Approval of department; ANT 815 and BPY 825 recommended. Interdepartmental with the departments of Zoology, Biophysics, and Physiology.
Structure and function of major component systems of vertebrate brains, their evolution, ontogeny and comparative analysis in mammals, birds, reptiles, amphibians and fish. Interrelation of behavioral, anatomical and physiological studies.

- 886. Vertebrate Neural Systems II**
Winter of even-numbered years. 5(3-4)
885. Interdepartmental with the departments of Biophysics, Physiology and Zoology and administered by the Department of Zoology. Continuation of 885. Major component systems of vertebrate brains, their evolution, ontogeny, and comparative analysis in mammals, birds, reptiles, amphibians and fish. Interrelation of behavioral, anatomical, and physiological studies.
- 889. Advanced Issues in Humanistic Psychology**
Winter, Spring. 3(3-0) May re-enroll for a maximum of 6 credits. 489 and approval of instructor. Identification and critical evaluation of social and philosophical issues tacitly imbedded in psychology, e.g., the specificity of the nature of man; human versus physical reality; freedom; modes of knowledge; ethical values.
- 890. Special Problems**
Fall, Winter, Spring, Summer. 1 to 12 credits. May re-enroll for a maximum of 36 credits. Approval of department.
- 899. Research**
Fall, Winter, Spring, Summer. Variable credit. Approval of department.
- 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**
Winter. 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**
Spring. 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.
- 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.
- 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.
- 969. Seminar in Industrial Psychology**
Fall, Winter, Spring. 2 to 4 credits. May re-enroll for a maximum of 16 credits. Approval of department. Specialized areas in industrial and organizational psychology.
- 970. Seminar in Ecological Psychology**
Fall, Winter, Spring. 4(4-0) May re-enroll for a maximum of 12 credits. Approval of department. Critical study of a contemporary ecological psychology issue such as the psychological aspects of over-crowding, the interpersonal and intrapersonal conflicts created by environmental degradation, and similar current topics.
- 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(2-2) 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. 1 to 4 credits. May re-enroll for a maximum of 12 credits. 981 and approval of department. Counseling and psychotherapy with a variety of clients of the University Counseling Center.

**Descriptions — Psychology
of
Courses**

983. Child Psychotherapy
Winter. 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.

**PUBLIC AFFAIRS
MANAGEMENT**

See Agricultural Economics

**RACIAL AND
ETHNIC STUDIES***

RES

College of Social Science

College of Urban Development

**240. Comparative Theories of
Racism and Ethnocentrism**
Fall, Spring, Summer. 4(4-0) U D
202.

The evolutionary development and comparison of the concepts of racism and ethnocentrism as defined by theories of multiracial, cultural pluralism, melting pot, and other relevant theories and specific review of their effects on minority groups.

**250. Racial and Ethnic Studies
in American Society**
Winter, Spring. 4(4-0) U D 202.

An examination of the development of American consciousness to race and ethnicity. Emphasis is given to agencies and organizations concerned with these areas.

**313. Development of American
Indians as an Ethnic Minority**
Spring. 4(4-0) Majors: U D 202; non-
majors: approval of department. ANP 419
recommended.

The history of the contact between Euro-Americans and American Indians is examined from the perspective of Native Americans.

*Established March 1, 1973.

**333. Contemporary Problems of
American Indians**
Spring. 4(4-0) 313.

An overview of contemporary American Indian problems including their background in federal policies, protests engendered, and possible solutions.

**363. The Formation of the Black
Urban Working Class**
Fall, Winter, Spring, Summer. 4(4-0)
Juniors or approval of department.

The historical formation of the urban black working class and the effects of racial and economic oppression on its culture, social institutions and world view

**385. Housing Problems of Minorities
in Urban Areas**
Fall, Spring. 4(4-0) U D 202, U P
433 recommended. Interdepartmental with the
Department of Urban and Metropolitan Studies.

A study of the housing problems of minority groups with special emphasis on low cost housing.

**393. Political Affairs of Native
Americans**
Winter. 4(4-0) 313.

An examination of the current political activities of Native Americans in Michigan.

401. Black (African) Diaspora
Fall. 4(4-0) Majors: Juniors and
U D 202; others: Juniors or approval of de-
partment.

Critical inquiry and analysis of the dispersion of black people in global perspective. Historical orientation to settlement patterns, economic, social and political change and development.

402. Chicano Dramatic Expression
Spring. 4(4-0) U D 202 for majors;
others: approval of department.

An overview of Chicano Dramatic Expression. Focuses on cultural and historical roots of Chicano drama, including Religious Folk-Theatre; contemporary expression, including guerilla-political and cultural theater.

**417. Minorities and Women in the
World of Work**
Fall, Spring. 4(4-0) Senior majors
or approval of department. Interdepartmental
with the Department of Management and the
School of Social Work and administered by
the Department of Management.

Racial, ethnic, sexual and other minority experiences and problems in the world of work. Awareness training approach (what it's like to be . . .) featuring movies, guests, subgroup discussions and encounter-type exercises.

**450. Mechanisms of Racial Dominance
and Conflict Resolution**
Spring. 4(4-0) U D 201 or approval
of department.

An examination of the institutional mechanisms of racial dominance and control. Focusing upon how these mechanisms operate to maintain the racial status quo and their effects upon racial minorities.

480. Independent Study
Fall, Winter, Spring, Summer. 2 to
4 credits. May re-enroll for a maximum of 12
credits. Juniors, approval of department.

Supervised individual study in a racial or ethnic area of interest.

**485. Selected Topics in Racial and
Ethnic Studies**
Fall, Winter, Spring. 4(4-0) May re-
enroll for a maximum of 8 credits. College
core or approval of department.

Contemporary issues and problems in the minority programs.

495. Senior Seminar
Spring. 4(4-0) Seniors.

Students will identify a major contemporary issue in racial and ethnic problems. A strategy for a solution will be developed and submitted to entire class.

498. Prefield Experience Seminar
Fall, Winter, Spring, Summer. 1 credit.
Approval of department. Interdepartmental with
the Department of Urban and Metropolitan
Studies and the College of Urban Development.
Administered by the College of Urban Develop-
ment.

Prepares students for the required College of Urban Development field experience. Students work with instructor in planning their field experiences and developing objectives and rationale. Approved through Winter term 1978.

499. Field Experience
Fall, Winter, Spring, Summer. 3 to 15
credits. May re-enroll for a maximum of 24
credits. 498 or approval of department. Inter-
departmental with the College of Urban Develop-
ment and the Department of Urban and
Metropolitan Studies. Administered by the Col-
lege of Urban Development.

The development of field research and analytical skills and the provisions of experiential learning via students participating in field work settings and public service projects. Approved through Winter term 1978.

RADIOLOGY† **RAD**

College of Human Medicine
College of Osteopathic Medicine

**480. Nuclear Medicine for Medical
Technologists**
Winter. 2(2-0)

Lab techniques in nuclear medicine, including physics instrumentation and essay methods with introduction to radiopharmaceutical preparation. In vitro studies are emphasized but in vivo procedures are also covered.

501. Radiologic Anatomy
Fall, Summer. 2(2-0) Approval of
department.

Principles and techniques of X-ray use. Identification of anatomical structures depicted on X-ray films.

**525. Fundamentals of X-ray
Interpretation**
Fall, Winter, Spring, Summer. 1 to 3
credits. May re-enroll for a maximum of 6
credits. Admission to College of Human Medi-
cine or College of Osteopathic Medicine. Others:
by approval of department.

Beginning laboratory course in recognition and interpretation of the normal and abnormal x-ray image. Use of x-ray as alternative diagnostic approach in efficient management of patients. Approved through Winter term 1978.

550. Decision Analysis in Medicine
Fall, Winter, Spring, Summer. 2 to 4
credits. May re-enroll for a maximum of 8
credits. Approval of department.

Analysis of decisions in medicine, with emphasis on the diagnostic process and clinical judgment. Approved through Winter term 1978.

†Established July 1, 1975.