A-174

**911. Theories of Administrative Organization**

Winter. 3(3-0) Majors or approval of department.

Analysis of some recent contributions by the behavioral sciences to formal organization theory.

**914. Comparative Public Administration**

Winter. 3(3-0) Majors or approval of department.

Comparative study of the administrative systems of major nations. Analysis of the manner in which these patterns have been transplanted into dependent and developing countries and of the subsequent modifications of these patterns. Social and cultural setting of administration.

**922. Judicial Behavior**

Fall of even-numbered years. 3(3-0)

Design and execution of research in judicial decision-making. Projects include both individual and group work, and field as well as library research. Critical evaluation of reports of other research investigations with which seminar projects articulate.

**931. Political Groups and Movements**

Fall of even-numbered years. 3(3-0)

Operation of interest groups, sociopolitical movements, cliques, and juntas. Interests and ideologies underlying these groups and channeling of their demands into the political system. Basis, growth, and internal politics of political groups and movements and their relation to formation of public policy and governmental institutions.

**933. Political Parties**

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

Operation of political parties in the political system. Relationship between party organization, electoral system, and the recruitment and advancement of political leaders. Interaction between parties and other political groups.

**934. Voting Behavior, Political Attitudes and Public Opinion**

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

Study of the voting behavior of electorates and political attitudes, popular voting, and public policies.

**942. Federalism and Intergovernmental Relations**

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

How federal systems originate and are maintained; patterns in allocations of power between national and state levels; the political processes involved in intergovernmental relations, cooperative federalism; trends in American federalism.

**943. Community Decision Making**

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

Discussion and critique of the power structure literature; emphasis on methods of studying community elites.

**944. State Government and Politics Seminar**

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

Comparative study of state governments based on resources and other aggregate characteristics, political organization and behavior. Models of political process, governmental structure variables and their relation to policy outputs.

**953. The Politics of Selected Areas**

Winter of even-numbered years. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department.

Analysis in depth, using comparative theory and method, of political systems and changes in selected administrative or cultural areas.

**955. Politics, State and Development**

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

Theories of politics and the state as they relate to development and underdevelopment. Analysis of liberal, Marxist and statist perspectives on Third World politics and change. The state as an object of political conflict and an instrument of development policy.

**964. Selected Topics in International Relations**

Winter. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department.

Intensive analysis of special problems and issues such as international political and economic development, international and intercultural communications, international violence, etc.

**972. Modern Political Thought**

Spring of even-numbered years. 3(3-0)

Systematic analysis of selected works of such writers as Machiavelli, Hobbes, Locke, Montesquieu, Hume, Rousseau, Burke, Mill, Marx or other political philosophers. Special attention is given to those writers or works relevant to understanding the philosophical foundations of contemporary social science and ideology.

**973. American Political Thought**

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

Study of the thinkers and social forces which have shaped American political ideology.

**981. Selected Topics in General Political Theory**

Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 credits. PLS 880 or approval of department.

Analysis in depth of such topics as individual political choice, collective choice and decision making, political coalitions, political leadership, political communication and diffusion processes, political integration and differentiation, quality and inequality, and interaction models of conflict.

**990. Seminar**

Fall, Winter, Spring. 4 to 12 credits. May reenroll for a maximum of 36 credits.

Intensive training in individual or group research. Sections of the seminar may involve one or more doctoral fields and the credit earned will vary accordingly.

**993. Readings in Political Science**

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 10 credits.

**999. Doctoral Dissertation Research**

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

**PSYCHOLOGY**

**PSY**

**College of Human Medicine**

**College of Osteopathic Medicine**

**520. Introduction to Behavioral Medicine**

Winter. 2(2-0) Admission to a college of medicine or approval of instructor.

Determination between various concepts of normality, understanding of psychological mechanisms, making observations and inference generation, recognition of normative crises and the psychiatric evaluation will be taught through lectures and discussions.

**521. Psychopathology**

Spring. 3(3-0) PSC 520 or concurrently.

Recognition, description, and treatment of most psychopathologic states will be taught using lectures, audio-visual presentations, and group discussions.

**533. Fundamentals of Personality Dysfunction**

Winter. 3(3-0) Admission to a college of medicine and approval of department; H M 514 concurrently.

Major psychiatric disorders. Mental disorders and patient behaviors that will be of value in working with nonpsychiatric and psychiatric patients.

**590. Special Problems in Psychiatry**

Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 15 credits. Medical 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 and Behavioral Science 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. Contemporary practice of psychiatry utilizing supervised in-patient, out-patient, emergency and community mental health services.

**609. Subspecialty Clerkship: Adult Psychiatry**

Fall, Winter, Spring. Summer. 4 to 16 credits. May reenroll for a maximum of 16 credits. PSC 608. Subspecialty experiences in Psychiatry in clinical settings with adults.

**610. Subspecialty Clerkship: Child Psychiatry**

Fall, Winter, Spring, Summer. 4 to 16 credits. PSC 608. Interdepartmental with the College of Osteopathic Medicine.

Subspecialty experiences in psychiatry in clinical settings with child patients and their families.

**PORTUGUESE**

See Romance and Classical Languages.
139. Psychology of Personality
   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 different social environments will be considered.
Topics include: socialization, interpersonal perception, group processes, motives, emotions, attitudes, and values. Students may participate in psychological experiments outside of class.

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)
PSY 160 or PSY 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)
PSY 160 or T E 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
   Fall, Winter, Spring. 4(4-0)
PSY 160 or PSY 170 or T E 200.
Developmental psychology of the infant and child including biological, social, cognitive, moral, perceptual and cultural development; relations with care givers and peers as well as development of individual characteristics.

246. Sensitivity to Children I
   Fall. 3(2-2) To receive credit PSY 246.
PSY 247. PSY 245 must be completed satisfactorily except by prior arrangement with instructor. Sophomores and 3 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 therapist, teachers and parents.

247. Sensitivity to Children II
   Winter. 3(2-2) To receive credit PSY 246.
PSY 247, PSY 245 must be completed satisfactorily except by prior arrangement with instructor. PSY 246.
Continuation of PSY 246.

254. Sensitivity to Children III
   Spring. 3(2-2) To receive credit PSY 246.
PSY 247, PSY 245 must be completed satisfactorily.
Continuation of PSY 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.

259. Independent Study: Research Participation
   Fall, Winter, Spring. 1 to 3 credits. May reenroll for a maximum of 6 credits.
PSY 160 or PSY 170, PSY 215.
Student participates as an assistant in an ongoing psychological research project under the direction of a staff member in order to become familiar with the procedures of psychological research.

300. Cognitive Psychology
   Winter. 4(4-0) PSY 170, PSY 215. 10 credits of psychology or approval of department.
Concepts, theories, methods and research findings in human information processing and cognition; including attention, memory, intelligence, problem solving, decision making, language, and reading.

301. Human Learning and Memory
   Winter, Spring. 4(4-0) PSY 170; PSY 215 or a college level mathematics or statistics course.
Concepts, procedures, issues, and principles involved in the acquisition, retention, transfer and execution of verbal learning, identification learning, and perceptual-motor skills.

309N. Fundamentals of Physiological Psychology
   Fall, Spring. 3(3-0) CEM 141, PSL 240. For students in the natural and life sciences. Students may not receive credit in both PSY 309N and PSL 308S.
Central nervous system functional anatomy and physiological bases of behaviors, including neural and hormonal control of biorhythms, reproduction, hunger and thirst.

309S. Survey of Physiological Psychology
   Fall, Spring. 3(3-0) PSY 170. For students in the social sciences and liberal arts. Students may not receive credit in both PSY 309N and PSL 308S.
Current topics in behavioral biology, including: the physiology of learning and memory; hormones and behavior; and human neurophysiology.

312. Learning and Motivation
   Fall, Winter. Summer of odd-numbered years. 3(3-0) PSY 170, PSY 215; PSY 312 concurrently.
Detailed analysis of basic conditioning processes such as reinforcement, discrimination, generalization, punishment, adverse 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. Summer of odd-numbered years. 3(3-4) PSY 170, PSY 215; PSY 312 concurrently.
Representative experiments in operant behavior, including an individual project selected by the student, using the pigeon as the laboratory animal.

316. Sensory Processes
   Winter. 3(3-0) PSY 170; PSY 215 or a college-level mathematics or statistics course.
Sensory organs and their associated neural systems as they relate to sensory phenomena; emphasis on vision. Review of major methodologies.

317. Perception
   Fall. 3(3-0) PSY 170.
Concepts, principles, results, and applications in perception; emphasis on vision.

335. Principles of Social Psychology
   Fall, Winter, Spring. 4(4-0) PSY 160. Students may not earn credit in both PSY 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.

337. Legal and Criminal Psychology
   Fall, Winter, Spring. 3(3-0) PSY 180 or T E 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
   Winter, Spring. 3(3-0) PSY 244.
Continuation of PSY 244 covering development during adolescence and youth with emphasis on problems of identity and adjustment to the social environment.

356. Organizational Psychology
   Fall, Spring. 3(3-0) An introductory course in psychology; PSY 255 or MGT 310. Students may not earn credit in both PSY 358 and MGT 419.
Leader behavior, attitudes, interpersonal behavior, motivation and communication of individuals in organizations.

357. Consumer Psychology
   Fall, Winter, Spring. 3(3-0) PSY 170; PSY 335 or SOC 251; or approval of department.
Psychology underlying techniques of effective advertising, selling, and marketing. Psychology relevant to living in a marketing-oriented culture.

370. Psychology and Social Innovation
   Winter. 3(3-0) PSY 160 or PSY 170.
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.

Psychology — Descriptions of Courses
371. Community Projects I
Fall, Spring. 4(2-4) PSY 160 or PSY 170, approval of department.
Experience in working directly with adolescent offenders from the local community. Techniques of intervention with adolescents, their families, and social systems which affect them.

372. Community Projects II
Winter, Summer. 4(2-4) PSY 371, approval of department.
Continuation of PSY 371 with primary focus on direct work with adolescents, their families and social systems which affect them.

373. Community Projects III
Fall, Spring. 4(2-4) PSY 372, approval of department.
Continuation of PSY 372.

390II. Honors Seminar
Fall, Winter, Spring. 1 to 5 credits.
May reenroll 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
Fall, Winter, Spring, Summer. 2(2-0) to 5(5-0) May reenroll 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.

403. Experimental Psychology: Human Learning
Spring. 4(4-0) PSY 215 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 (PSY 400-PSY 401) may be taken concurrently to complete appropriate projects.

405. Modern Viewpoints in Psychology
Fall, Spring. 3(3-0) 15 credits in psychology.
Survey of psychological systems in the modern era including behaviorism, Gestalt psychology, psychoanalysis, neo-behaviorism in relation to other selected disciplines.

409. Advanced Concepts in Physiological Psychology
Fall, Spring. 4(4-0) PSY 308N 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
Winter. 4(4-0) PSY 301 or LIN 401.
Experimental psycholinguistics of language, including speech perception, sentence processing, prose comprehension and memory, and language production.

415. Psychological Tests and Measurements
Fall, Winter, Spring. 5(5-0) PSY 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.

424. Child Psychopathology
Winter, Spring. 4(4-0) PSY 244 or approval of department.
Description, etiology, and developmental pattern of behavior problems of children and adolescents; introduction to child and family treatment approaches.

425. Abnormal Psychology
Fall, Winter, Spring, Summer. 4(4-0) PSY 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 somatoform psychoses; some consideration of therapies and theories of prevention.

427A. Personality: Dynamic Theories (457)
Fall, Winter, Spring. 3(3-0) PSY 425.
Survey of personality theories of development, structure, and dynamics related to learning, determinants, cultural influences, behavioral disorders and assessment methods.

427B. Survey of Personality Research (PSY 436)
Fall. 3(3-0) PSY 160, PSY 215, PSY 427A or approval of instructor.
Empirical investigations of personality dynamics and the effects of individual differences on subjective experience and social interaction.

435. Advanced Social Psychology
A. Research Methods in Social Psychology
(438) Fall, Winter, Spring. 4(2-4) PSY 215; PSY 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.

B. Social Cognition
Fall. 3(3-0) PSY 335 or SOC 251.
Theories and research on social cognition. Person perception, attribution theory, theories of the self, person memory.

C. Interpersonal Behavior and Relations
Winter. 3(3-0) PSY 335 or SOC 251.
Theories and recent research in interpersonal behavior. Social exchange, prosocial behavior, aggression, attraction and prejudice.

D. Attitudes
Spring. 3(3-0) PSY 335 or SOC 251.
Classical theories of attitude formation and change, dissonance theory, inoculation theory and the persuasion-communication approach.

E. Group Behavior
Spring. 3(3-0) PSY 335 or SOC 251.
Theories and research on small group behavior.

F. Social Psychology and Society
Winter, Spring. 3(3-0) PSY 335 or SOC 251.
Applications of social psychology to social issues, problems and institutions. Topics may include social psychology and the law, political behavior, energy conservation.

439. Selected Topics in the Psychology of Women
Fall, Spring. 3(3-0) May reenroll 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; psychophysiology of women; professional and traditional orientations; third world women.

444. Advanced Developmental Psychology
A. Social Development
Fall of odd-numbered years. 4(4-0) PSY 160, PSY 170, PSY 215, PSY 244 or approval of department.
Theories and recent research in social development of infants, children, and adolescents.

B. Cognitive Development
Winter of even-numbered years. 4(4-0) PSY 160, PSY 170, PSY 244 or approval of department.
Recent approaches to cognitive development. A view of selected theories and experiments.

C. Language Development
Spring of odd-numbered years. 4(4-0) PSY 160, PSY 170, PSY 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 of even-numbered years. 4(4-0) PSY 160, PSY 170, PSY 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) PSY 215, PSY 255.
Quantitative psychological research technique applied to typical personnel problems in industry and government.

456. Personnel Training and Development
Spring. 4(4-0) PSY 356 or MGT 419.
Each student develops skills called for in training work-level supervisors, managers, and department managers in industry, business, and government—all in an organization development frame of reference. Relevant research reviewed.

470. Research Methods in Ecological Psychology
Spring. 4(3-3) PSY 160, PSY 170, PSY 215; PSY 370 or approval of department.
Methods, techniques, and measurement instruments for applying psychology to the solution of contemporary human problems. Critical analysis of methods for creating and measuring social change.

484. Literature and Psychology
Spring. 4(4-0) Juniors or approval of department. Interdepartmental with and administered by the Department of English.
An application of psychological theory to the study of literature and an exploration of the ways in which literature enriches the theory which helps to illuminate it.
455. Psychology of Love and Maturity
Fall, Winter. 3(3-0) Juniors and 3 courses in psychology.
The function of love in human existence. Varie­
ties of love; their effect upon the growth of the
person in terms of awareness, integration, au­
thenticity, social concern and responsibility, maturity and fulfillment.

456. Psychology of Music
Fall, Summer. 3(3-0) Approval of de­
partment. Interdepartmental with the Depart­
ment of Music.
Musical behavior with emphasis on psychologi­
cal aspects of perception, learning, affective re­
sponse, and ability. Emphasis on social and cultural influences in forming musical tastes, in­
cluding mass media music.

457. Psychology of Music
Winter, Summer. 3(2-2) PSY 486 or ap­
proval of department. Interdepartmental with the Depart­
ment of Music.
Basic research concepts and experimental meth­
ods in psychology of music research. Practical training in conducting experimental research of
musical behavior.

458. Humanistic Psychology
Fall, Spring. 3(3-0) Juniors and 3 courses in psychology.
Subject matter is drawn from the psychology of personality in its various forms. The usual ap­
proaches of the behavioral sciences are subject to critical analysis. One goal is to derive some ele­
ments of a philosophy of life for humans as po­
tentially rational and ethical beings.

459. Special Problems in Psychology
Fall, Winter, Spring, Summer. 1 to 6
credits. May reenroll for a maximum of 12 cred­
its. Combined credits in PSY 490 and PSY 491
may not exceed 12. Juniors, approval of depart­
ment.
Each student will work under direction of a staff
member on an experimental, theoretical, or ap­
plied problem.

460. Participation in Psychological Projects
Fall, Winter, Spring, Summer. 1 to 6
credits. May reenroll for a maximum of 12 cred­
its. Combined credits in PSY 490 and PSY 491
may not exceed 12. Juniors, approval of depart­
ment.
Each student will participate in a psychological project under direction of a staff member.

461. Senior Project
Fall, Winter, Spring. 3(0-6) May
reenroll for a maximum of 6 credits. PSY 390H or ap­
proval of department.
Independent research involving literature sur­
vey, naturalistic observation, or experimental investigation with staff supervision. Preparation of the Senior paper.

462. Conditioning and Learning
Fall. 3(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 in­
fralinear data.

463. Perception
Fall of even-numbered years. 3(3-0)
Majors or approval of department.
Consideration in depth of selected topics in per­
ception. Integration of theoretical and empirical
material.

504A. Neuroscience Laboratory I
Winter, 4(2-4) ZOL 827 and approval of instructor. Interdepartmental with the de­
partments of Physiology and Zoology.
Development of skills in the methods, techniques and instrumen­tation necessary for research in a variety of areas concerned with neuroscience.

504B. Neuroscience Laboratory II
Spring, 4(2-4) PSY 804A, Interdepart­
mental with the departments of Physiology and
Zoology.
Continuation of PSY 804A.

505. History and Systems
Fall of even-numbered years. 3(3-0)
Psychology majors or approval of department.
Major scientific, cultural, philosophical, and personal influences in the development of psy­
chology. Analysis of persisting issues.

510. Cognitive Processes
Winter. 3(3-0) Majors or approval of depart­
ment.
Experimental findings and theories on human cognition including the topics of attention, pat­
tern recognition, skill acquisition, memory, lan­
guage processing, problem solving, and decision making.

511. Advanced Physiological Psychology
Spring, 4(4-0) Majors or approval of depart­
ment.
Psychology as a biological science. Consider­
ation of physiological events underlying organ­
environment interaction.

514. Psychology of Language
Spring, 3(3-0)
Experimental psycholinguistics, including speech perception, sentence processing, prose
comprehension and memory, language produc­
tion, and language acquisition.

515. Advanced Psychometrics
Fall, Winter, 4(4-0) A course in statisti­
cal inference; majors or approval of department.
Theory and practice in analysis and interpreta­
tion of psychological data.

516. Advanced Psychometrics
Winter, Spring, 4(4-0) PSY 815.
Continuation of PSY 815.

517. Advanced Psychometrics
Spring, 4(4-0) PSY 816.
Multivariate methods of test analysis: multiple and partial correlation, factor and pattern anal­
ysis.

518. Test Construction
Winter. 4(4-0) PSY 817.
Theory, methods, and techniques in the prepa­
ration and development of psychological test
items and tests.

520. Mathematical Models in Psychology I
Fall, 4(4-0) MTH 111 and STT 201 or approval of department.
Discussion of the relationship between mathe­
matics and psychological theory. Examination of the concepts of structure and change in quali­
tative psychological systems. Application of al­
gerbic techniques to psychological theory.

521. Mathematical Models in Psychology II
Winter of even-numbered years. 4(4-0)
PSY 820 or approval of department.
Representative mathematical models in psychol­
ogy, attending particularly to stochastic models and the relationship between models and data. Advantages of various models for different psy­
chological problems.

528. Clinical Assessment I
Fall. 2(0-4) Majors or approval of depart­
ment.
Assessment of psychodynamics and psychopa­
thology. Individual case studies based on in­
terviews and psychological tests. Behavioral correlates of psychodynamic problems.

530. Clinical Assessment II
Winter. 2 or 3 credits. PSY 828, ap­
proval of department.
Clinical assessment of children. Individual case studies making systematic use of behavior obser­
vations, interviews, and standardized tests. Inte­
gration of data and principles of development of new assessment procedures.

532. Clinical Assessment III
Spring. 2 or 3 credits. PSY 830, ap­
proval of department.
Self-appraisal and investigation of interpersonal transactions in two-person and larger groups.
Standardized techniques, individual case stu­
dies, and principles of development of new
methods.

533. Research Methods in Clinical Psychology
Fall. 4(3-2) Majors or approval of depart­
ment.
Research strategies and the clinical method: types of evidence, similarities and differences.
Questionnaires and scale construction. Intro­
duction to design and data analysis. Social psy­
chological and ethical issues in clinical research.

535. Experimental Psychology: Social
Fall. 4(2-4) One course in experimental psychology.
Intensive experience in designing, executing, re­
porting and evaluating research in social psy­
chology, including an individual research project.

540. Advanced Social Psychology: Cognitive Approaches
Winter. 4(4-0) PSY 815; 20 credits in
the social sciences.
Contemporary theory and research in social psy­
chology dealing with attitude organization and
cognition, values, attitudes and behavior, atti­
tude change and balance theories.

541. Advanced Social Psychology: Group Processes
Spring. 4(4-0) PSY 815; 20 credits in
social sciences.
Contemporary theory and research dealing with
the individual in a group context.

545. Developmental Psychology: Infancy
Fall of odd-numbered years. 4(4-0)
Majors or approval of department.
Human infancy: conception to three years. De­
velopmental study of: prenatal life, personal­
ity, learning, perception, sensory stimulation and deprivation, neuropsychology, psychophys­
iology, language and cognition.
Descriptions — Psychology

of Courses

846. Developmental Psychology:
Childhood
Winter of even-numbered years. 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 of even-numbered years. 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.

848. Developmental Psychology:
Adulthood and Aging
Spring of odd-numbered years. 3(3-0)
Majors or approval of department.
Normal development from early to late adulthood.
Includes physical and physiological changes;
intellectual functioning; personal development;
normative and non-normative transitions;
social relations including love, family, friendship;
work, vocational development, retirement.

849. Developmental Psychology:
Theory
Winter of odd-numbered years. 3(3-0)
Majors or approval of department.
Philosophical origins of contemporary theory in
developmental psychology: cognitive, information
processing, maturation, dialectical, psychoanalytic,
behavioral, organismic, general systems, psychobiology,
and stage-related theories.

850A. Developmental Psychopathology I
Fall. 3(3-0) Approval of department.
Developmental and systems perspective to child-
hood and adolescent psychopathology: Epidemiological
research, classification systems, mental retardation, learning disabilities,
and pervasive developmental, psychotic, and
organic disorders.

850B. Developmental Psychopathology II
Winter. 3(3-0) PSY 850A or approval of department.
Externalizing and internalizing disorders of childhood and adolescence including conduct,
affective, anxiety-withdrawal, adjustment reaction,
personality, eating, sexual, dependency, and disorder with physical manifestations.

850C. Developmental Psychopathology III
Spring. 3(3-0) PSY 850B or approval of department.
Adolescent and adult psychopathology from a developmental perspective; marital and family
pathology as system dysfunctions; conceptual frameworks for these phenomena; description/diagnosis, etiology and intervention with some representative pathologies.

851. Neuropsychology
Fall. 4(4-0) Graduate students in psychology or approval of instructor.
Basic research and theory in the neuropsychology
of cognition, language, memory, emotions, manual performance, visual-spatial functions,
lateral specialization, and the relationship be-
tween brain lesion and recovery of function.

852A. Neuropsychological Assessment
Spring of odd-numbered years. 3(2-0)
PSY 811, ANT 865; PSY 851; or approval of department.
Theory, research, and practice related to the be-
havioral expression of brain dysfunction in adults. Overview of selected neuropsychological
instruments in current use and their clinical applications.

852B. Neuropsychological Assessment Laboratory
Spring of odd-numbered years. 3(0-6)
PSY 852A concurrently, clinical psychology graduate student; or approval of department.
Intensive practice in the administration of neuropsychological assessment instruments with
emphasis on the Halstead-Reitan Test Battery.

860. Advanced Industrial Psychology
Fall. 4(4-0) Twenty credits in the behav-
ioral 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(4-0) Fifteen graduate credits.
Survey of current theories of individual behavior in complex organizations. Examples from
search in industry, government, and other complex organizations.

865. Advanced Neurobiology
(BIM 865.) Spring. 4(4-0) ZOL 827.
Interdepartmental with the departments of Anatomy, Physiology, and Zoology. Administered by the Department of Anatomy.
Basic organization, structure and function of neural networks comprising sensory, motor, and
autonomic systems including examples from invertebrates and vertebrates.Attendance at
neuroscience seminar is required.

866. Personnel Selection and Evaluation
Fall of even-numbered years. 3(3-0)
Fifteen graduate credits.
Critical treatment of research methods and instru-
ments in personnel selection and evaluation as applied to governmental, business and industrial
situations.

870. Introduction to Ecological Psychology
Fall. 4(4-0) PSY 815 concurrently or approval of department.
What and why of experimental ecological psy-
chology; planning, action, evaluation, dissemination
of information. Researchable problems, fund-
ing, dynamics of research teams, identifying ecological variables. Class work and commu-
nity research.

871. Advanced Ecological Psychology
Winter. 4(4-0) PSY 870.
Applications of ecological psychology; measure-
ment; hypotheses and research plans; initiating, maintaining, terminating naturalistic psycholog-
ical 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) PSY 870, PSY 871.
Use of psychological research to produce social change. Creation of acceptance of social change. Examination of effectiveness of experimental inter-
vention into social systems. Class work plus community research.

873. Ecological-Community Psychology Research Methods I
Fall. 4(4-0) Approval of department.
Ecological-community psychology literature with the intent of identifying social problems,
methods for their solution, and the philosophi-
cal, political, and role-definition issues con-
fronting the ecological-community psychologist. At least eight hours per week in a community setting required.

874. Ecological-Community Psychology Research Methods II
Winter. 4(4-0) PSY 873, approval of department.
Planning and design of innovative field research including research planning, experimental de-
sign, quasi-experimental design, program eval-
uation, measurement, data-gathering, validity and reliability, and the dissemination of re-
search results. At least eight hours per week in a community setting required.

875. Ecological-Community Psychology Research Methods III
Spring. 4(4-0) PSY 874, approval of department.
Implementation of field research and data anal-
ysis; coverage of SPSS commands and programs.
At least eight hours per week in a community setting required.

880A. Basic Concepts and Issues in Clinical Psychology
Fall. 3(3-0) Clinical majors or ap-
proval of department.
Concepts and issues underlying research and professional practice in modern adult clinical
psychology. Emphasis is on personality develop-
ment and clinical interventions, such as psycho-
therapy, behavior therapy, family therapy, and community approaches.

880B. Basic Concepts and Issues in Clinical Psychology
Winter. 3(3-0) PSY 880A, approval of department.
Continuation of PSY 880A.

880C. Basic Concepts and Issues in Clinical Psychology
Spring. 3(3-0) PSY 880B, approval of department.
Continuation of PSY 880B.

885. Vertebrate Neural Systems I
(PSY 885.) Winter of even-numbered years. 5(3-4)
Approval of department. Interdepartmental with the departments of Anatomy, Physiology and Zoology. Administered by the Department of Anatomy.
Structure and function of major component sys-
tems of vertebrate brains, their evolution, ontology and comparative analysis in mammals,
birds, reptiles, amphibians and fish. Interrela-
tion of behavioral, anatomical and physiological studies.

886. Vertebrate Neural Systems II
(ZOL 886.) Spring of even-numbered years. 5(3-4)
Interdepartmental with the departments of Anatomy, Physiology, and Zoology. Administered by the Department of Anatomy.
Continuation of PSY 885. Major component sys-
tems of vertebrate brains, their evolution, ontology, and comparative analysis in mammals,
birds, reptiles, amphibians and fish. Interrela-
tion of behavioral, anatomical, and physiological studies.
890. **Seminar in Organization Theory**

Winter. 4(4-0) MGT 806; doctoral candidates; master's candidates with approval of department. Interdepartmental with and administered by the Department of Management. Directed reading and research on issues in contemporary organization theory.

891. **Seminar in Advanced General Psychology**

Fall, Winter, Spring. 1 to 4 credits. May reenroll in different areas for a maximum of 4 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.

892. **Practicum: Psychological Clinic I**

Fall. 2 to 5 credits. 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.

893. **Practicum: Psychological Clinic II**

Winter. 2 to 5 credits. PSY 928. Continuation of PSY 928.

894. **Practicum: Psychological Clinic III**

Spring. 2 to 5 credits. PSY 930. Continuation of PSY 930.

895. **Seminar in Personality**

Fall, Winter, Spring. 1 to 4 credits. May reenroll 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.

896. **Organizational Diagnosis and Change**

Winter. 3(3-0) Thirty graduate credits. Review and analysis of research on sentiments, beliefs and opinions, authoritarianism, pseudoauthoritarianism, and democratic personality; functions, resistance to change and relation to value systems and ideology.

900. **Special Problems**

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 36 credits. Approval of department.

897. **Master's Thesis Research**

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

901. **Psychology — Descriptions of Courses**

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

Fall, Winter, Spring. 2 to 4 credits. May reenroll 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 intra-personal conflicts created by environmental degrada­tion, and similar current topics.

903. **Rorschach Method**

Fall, Winter. 4(4-0) PSY 832. History and hypotheses of the method. Review of research. Administration and scoring of the test. Introduction to interpretation.

904. **Advanced Practicum: Psychological Clinic**

Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 15 credits. PSY 932. Clinical experience in assuming responsibility for total case integration and interpretation of findings to parents and agencies.

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

Winter. 3(3-0) PSY 976. Behavioral and development disorders such as psychosis, delinquency, mental deficiencies; selected functional and organic psychotic syndromes; psychosis as distinguished from psychoneurosis; continuity versus discontinuity of normal to abnormal behavior. Research considerations.

906. **Counseling and Psychotherapy**

Fall. 3(3-2) 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.

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

Winter. 3(3-2) PSY 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.
Courses

981. Practicum: Counseling and Psychotherapy
Spring. 3(2-2) PSY 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 reenroll for a maximum of 12 credits. Approval of department.
Counseling and psychotherapy with a variety of clients of the University Counseling Center.

985. Seminar in Clinical Psychology
Fall, Winter, Spring. 1 to 4 credits. May reenroll 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. Doctoral Dissertation Research
Fall, Winter, Spring. Variable credit. Approval of department.

PUBLIC AFFAIRS MANAGEMENT

See Agricultural Economics.

RADIOLOGY RAD

College of Human Medicine

College of Osteopathic Medicine

450. Nuclear Medicine for Medical Technologists
Spring. 3(2-2) PHY 237, PHY 257; MTH 100; Junior or Senior Medical Technology majors.

525. Fundamentals of X-ray Interpretation
Fall, Winter, Spring, Summer. 2(2-0)
Admission to College of Human Medicine or College of Osteopathic Medicine. Others: approval of department.
Beginning laboratory course in recognition and interpretation of the normal and abnormal X-ray image. Use of X-ray as an alternative diagnostic approach in efficient management of patients.

550. Decision Analysis in Medicine
Fall, Spring. 2(2-0) Graduate/Professional students or approval of department.
Terminology and fundamentals of objective decision analysis, application to problems in diagnosis and treatment. Diagnostic test performance, patient management strategies, utility analysis, cost-effectiveness, patient's role in medical decisions.

RELIGIOUS STUDIES REL

College of Arts and Letters

101. Elementary Hebrew
Fall, 4(4-1) Interdepartmental with and administered by Hebrew.
Introduction to the Hebrew language, with pronunciation and conversation practice, reading and writing, and basic grammatical analysis of biblical and modern Hebrew.

102. Elementary Hebrew
Winter. 4(4-1) HEB 101. Interdepartmental with and administered by Hebrew.
Continuation of HEB 101.

103. Elementary Hebrew
Spring, 4(4-1) HEB 102. Interdepartmental with and administered by Hebrew.
Continuation of HEB 102.

150. Exploring Religion (A)
Fall, Winter, Spring. 3(3-0)
The nature of religious language and belief; sacred time, space, and literature; religious myths, rituals, and symbols; varieties of religious experience; the question of religious knowledge and truth.

151. Western Religions (A)
Fall, Winter, Spring. 3(3-0)
Historical-comparative approach to Jewish, Christian, and Muslim beliefs, practices, and worldviews, including views of God and other supernatural beings, human nature and destiny, paths for spiritual achievement, death and afterlife.

152. Eastern Religions (A)
Fall, Winter, Spring. 3(3-0)
Historical-comparative approach to Hindu, Buddhist, Confucian, Taoist, and Shinto beliefs, practices, and worldviews, including views of nature of ultimate reality, human nature and destiny, death and beyond.

201. Intermediate Hebrew
Fall. 4(4-1) HEB 103. Interdepartmental with and administered by Hebrew.
Systematic review of grammar, oral practice and reading of modern pointed and unpointed texts. Root-finding skills and dictionary exercises.

202. Intermediate Hebrew
Winter. 4(4-1) HEB 201. Interdepartmental with and administered by Hebrew.
Continuation of HEB 201.

203. Intermediate Hebrew
Spring. 4(4-1) HEB 202. Interdepartmental with and administered by Hebrew.
Continuation of HEB 202. Primarily unpointed Hebrew texts and newspapers.

210. Denominations in America
Winter. 3(3-0)
Religious denominations in America, their origins, history, beliefs, sociology, influence, strengths, tensions; distinctions among sect, cult, and denomination; analysis of trends pointing to alternate futures; ecumenical movement.

220. Old Testament (A)
Fall. 3(3-0)
A study of the history, literature and religion of Israel based on a critical examination of the Biblical texts.

221. Old Testament (A)
Winter. 3(3-0)
A continuation of REL 220.

222. New Testament (A)
Spring. 3(3-0)
A study and analysis of the texts of the New Testament in light of their historical setting.

295. Individual Readings
Fall, Winter, Spring. 1 to 5 credits. May reenroll for a maximum of 10 credits if a different topic is taken. Approval of department.
Supervised independent study of a particular topic in religious studies not covered in the regular courses.

299. Special Topics
Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 6 credits.
Selected topics not available on regular basis as part of standard curriculum. Offered as faculty interest and availability permit.

300. Life of Christ
Fall. 3(3-0)
The life of Christ as recorded in the Gospels in light of Christian tradition and ancient and modern scholarship.

302. Writings of St. Paul
Winter. 3(3-0)
Analysis of the major Pauline letters together with the Book of Acts in the light of their significance for the early Church and for contemporary Christianity.

305. Christian Ethics and Society
Spring. 4(4-0)
Biblical and theological bases for social action. Areas of contemporary discussion including the relation of love to justice, individual ethic to social ethic, situation to principle, and the social order.

310. Christianity
Winter. 3(3-0)
Origins and historical development of Christianity, major doctrines and liturgical practices, ethical stance, institutional forms (Eastern Orthodox, Roman Catholic, Protestant), social and cultural contributions, contemporary status and role.