MHF 4102 LOGIC AND SET THEORY -6A (3)
PR: MAC 3311 or MAC 3281, or CI. First half: An introduction to the Propositional and Predicate Calculus, concentrating on proofs. Second half: An introduction to naive set theory, up to cardinal numbers, concentrating on sets of numbers.

MTH 5303 THE EARLY HISTORY OF MATHEMATICS -6A -XMW (3)
PR: MAC 3312 and upper-level standing. A study of the history and development of mathematics and its cultural impact from the formation of number systems to the Renaissance.

MTH 5405 MATHEMATICAL LOGIC AND FOUNDATIONS I (3)
PR: MAS 4301 or CI. Two-course sequence covering: predicate calculus and classical model theory; transfinite set theory and the system ZFC; recursion theory and decidability.

MTH 5406 HISTORY OF MODERN MATHEMATICS (3)
PR: MAC 3313. Traces the development of mathematical ideas in Western culture. Special emphasis is placed on those concepts which led to the Calculus. This course is open to majors and non-majors alike.

MTG 4212 GEOMETRY -6A (4)
PR: MAC 3311. Emphasis on axiomatics, advanced Euclidean geometry, elements of projective geometry, non-Euclidean geometries.

MTG 5256 DIFFERENTIAL GEOMETRY (3)
PR: MAA 4211, MAS 3103. Exterior calculus, differentiable manifolds, integration of differential forms, surfaces in 3-space, covariant derivative, curvature, matrix groups.

MTG 5317 TOPOLOGY II (3)

MTG 5317 TOPOLOGY II (3)
PR: MTG 5316. The fundamental group; elements of homotopy theory and homology theory.

STA 2022 BASIC STATISTICS -6A -QM (3)
Basic probability of statistical thinking. Acquisition of data. Techniques for organizing and presenting statistical data. Sample mean, variance and standard deviation. Statistical decisions--estimation and hypothesis testing. Design of experiments, linear association and prediction. Statistical software: MINITAB. (No credit for Mathematics Majors.)

STA 3024 INTRODUCTORY STATISTICS II -6A (3)
PR: STA 3023 or CC. Factorials, ANCOV; multiple curvilinear regression; response surfaces; Latin squares, Split Plots, incomplete designs; distribution free methods.

STA 4321 INTRODUCTION TO STATISTICS -6A (3)

STA 4442 INTRODUCTION TO PROBABILITY -6A (3)
PR: MAC 3313, MAS 4301. Introduction to probability theory using calculus. Basic ideas of probability and random variables, discrete probability functions, continuous probability densities including normal, gamma, x (Greek letter Chi), and t, binomial, Poisson, uniform, normal, etc. Estimation of parameters and probabilities of random variables.

STA 5166 COMPUTATIONAL STATISTICS I (3)
PR: STA 4321, CGS 3422 or CC. Statistical Analysis of data by means of statistics package programs. Regression, ANOVA, discriminant analysis, and analysis of categorical data. Emphasis is on inter-relation between statistical theory, numerical methods, and analysis of real life data.

STA 5228 SAMPLING TECHNIQUES (3)

STA 5326 MATHEMATICAL STATISTICS (3)
PR: STA 5446. Sample distribution theory, point and interval estimation, optimality theory, statistical decision theory and hypothesis testing.

STA 5446 PROBABILITY THEORY I (3)
PR: STA 4442 and MAA 4212 or CI. Axioms of probability, random variables in Euclidean spaces, moments and moment generating functions, modes of convergence, limit theory for sums of independent random variables.

STA 5526 NON-PARAMETRIC STATISTICS (3)

PHILOSOPHY

PHI 3000 INTRODUCTION TO PHILOSOPHY -6A -HP (3)
An introduction to selected philosophical problems and traditions.

PHI 3062 HISTORY OF PHILOSOPHY: ANCIENT AND MEDIEVAL (3)
A survey of Western philosophy from the pre-Socratics to the end of the Middle Ages.

PHI 3420 HISTORY OF PHILOSOPHY: MODERN (3)
A survey of Western philosophy from the end of the Middle Ages to the nineteenth century.

PHI 4421 CONTINENTAL PHILOSOPHY (3)
A study of developments in post-Kantian European philosophy.

PHI 4600 CONTEMPORARY PHILOSOPHY -6A -XMW (3)
Selected schools of twentieth century thought such as idealism, positivism, pragmatism, realism, and existentialism.

PHI 4931 AMERICAN PHILOSOPHY -6A -XMW (3)
Major traditions in American thought, Puritanism, the Enlightenment, Transcendentalism, Idealism, Pragmatism, and Analytic Philosophy in relation to American culture.

PHI 1103 CRITICAL THINKING -SS (3)
Methods of thinking that lead to reliable conclusions, with emphasis on concrete cases in ordinary thinking and the sciences.

PHI 2100 INTRODUCTION TO FORMAL LOGIC -6A -QM (3)
An elementary study of propositional, predicate, class and syllogistic logic with some attention to basic problems of epistemology.

PHI 3404 SCIENTIFIC METHOD (3)
Probability, inductive inference, the hypothetico-deductive method, experimentation, and selected topics in the philosophy of science.

PHI 3600 ETHICAL THEORY (3)
A study of ethical theories, concepts, problems and methods.

PHI 3601 CONTEMPORARY MORAL ISSUES -6A -SS (3)
Open to all students. A study of contemporary moral issues concerning racism, sex, sexism, abortion, poverty, crime, war, suicide, and human rights in general.

PHI 3631 ETHICS AND BUSINESS (3)
An application of traditional ethical theories to contemporary problems in business.

PHI 3633 BIOMEDICAL ETHICS (3)
This course will focus on the ethical issues arising from advances in medical practice, delivery of health care, and scientific research.

PHI 3636 PROFESSIONAL ETHICS (3)
PR: Junior standing. An examination of the ethical problems that professionals will face in the complex, global society of the next few decades: confidentiality, divided loyalty, racism, sexism, etc.

PHI 3840 ENVIRONMENTAL ETHICS -SS (3)
A study of alternative theories of environmental ethics, including the application of these theories to contemporary environmental problems, such as pollution, resource depletion, species extinction, and land use.
PHI 3700 PHILOSOPHY OF RELIGION - 6A - SS
Analysis of religious experience and activity and examination of principal religious ideas in light of modern philosophy.

PHI 3905 DIRECTED STUDY
PR: Cl. Individual study directed by a faculty member. Approval slip from instructor required.

PHI 3930 SELECTED TOPICS
PR: Cl. Selected topics according to the needs of the student. Approval slip from instructor required.

PHI 4073 AFRICAN PHILOSOPHY - XMW
A descriptive and analytical study of African philosophical thought, featuring reflective comparisons of African and Western categories of thought. (May also be taken for credit in Africana Studies.)

PHI 4300 THEORY OF KNOWLEDGE - 6A - XMW
An examination of human knowledge; its scope and limits, and an evaluation of evidence, criteria of truth, the nature of belief, conditions for meaningfulness, theories of perception, and a study of memory and sense perception in the four major fields of nature, history, personal experience, and the a priori.

PHI 4320 PHILOSOPHY OF MIND - 6A - XMW
A study of statistical and current issues in philosophy of mind, including the nature and status of mind/body dualism, the relationship of mind and body, the problems of other minds, the physical basis for intelligence, etc.

PHI 4632 FEMINIST ETHICS - XMW
A study of the varied approaches to moral reasoning taken by feminist ethical writers such as Wolstoncroft, Mill, Giligan, Daily, Hooagland and others. (May also be taken for credit in Women's Studies.)

PHI 4800 AESTHETICS - 6A - XMW
A study of traditional and contemporary aesthetic theories with emphasis on creative process, the nature of the art work, the aesthetic response, expressiveness, form and content, as well as art and morality.

PHI 4905 DIRECTED STUDY
PR: Cl. Individual study directed by a faculty member. Approval slip from instructor required.

PHI 4930 SELECTED TOPICS
PR: Cl. Selected topics according to the needs of the senior students. Approval slip from instructor required.

PHI 5135 SYMBOLIC LOGIC
PR: PHI 2100 or Cl. Study of topics such as the following: Metatheory of propositional and predicate logic, related metamathematical results, alternative logics.

PHI 5225 PHILOSOPHY OF LANGUAGE
PR: Eight hours of philosophy, major in linguistics, or Cl. An examination of semantical, syntactical, and functional theories of language with special attention given to the problems of meaning, linguistic reference, syntactical form, and the relations between scientific languages and ordinary linguistic usage. Seminar format.

PHI 5913 RESEARCH
PR: Cl. Individual research supervised by a faculty member. Approval slip from instructor required.

PHI 5934 SELECTED TOPICS
PR: Cl. Selected topics according to the needs of the student. Approval slip from instructor required.

PHM 3021 PHILOSOPHIES OF LOVE AND SEX
Discussion of Philosophies of Love/Sex of Plato, Aristotle, Epicurus, Aquinas, Hume, Kant, Schopenhauer, Russell, Sartre, Marx, etc.

PHM 3100 SOCIAL PHILOSOPHY - 6A
An analysis of rival theories of social order and their philosophical foundations.

PHM 3400 INTRODUCTION TO PHILOSOPHY OF LAW
A study of the fundamental concepts of law from a philosophical standpoint including crime, justice, punishment, free speech, insanity, etc.

PHM 4323 ANCIENT AND MEDIEVAL POLITICAL PHILOSOPHY - 6A - XMW
A survey of political philosophy from 6 B.C. until 1600 A.D., including an examination of the ethical, metaphysical, and epistemological bases of these philosophies.

PHM 4331 MODERN POLITICAL PHILOSOPHY - XMW
A survey of political philosophy from 1600 A.D. until 1900 A.D., including an examination of the ethical, metaphysical, and epistemological bases of these philosophies.

PHM 4340 CONTEMPORARY POLITICAL PHILOSOPHY - 6A - XMW
A survey of political philosophy in the twentieth century, including an examination of the ethical, metaphysical and epistemological bases of these philosophies.

PHM 5125 TOPICS IN FEMINIST PHILOSOPHY
A study of recent feminist philosophical approaches to epistemology, aesthetics or political philosophy. (May also be taken for credit in Women's Studies.)

PHP 3786 EXISTENTIALISM - 6A - HP
A study of the religious and atheistic existentialists and the bearing of their views on religion, ethics, metaphysics, and theory of knowledge.

PHP 4000 PLATO - 6A - XMW
The examination of Plato will include the dialogues Protagoras, Georgias, Meno, Republic, etc.

PHP 4010 ARISTOTLE - 6A - XMW
Study of Aristotle's philosophy.

PHP 4410 KANT
Lecture and discussion of Kant's philosophy, especially The Critique of Pure Reason.

PHP 4740 THE RATIONALISTS - 6A
A careful study of the epistemologies of Descartes, Spinoza, Leibniz, and Malebranche.

PHP 4745 THE EMPIRICISTS - 6A
A careful study of epistemologies of Locke, Berkeley, Hume, and Thomas Reid.

PHP 4784 ANALYTICAL PHILOSOPHY - 6A
A study of the method devoted to clarifying philosophical problems through analysis of the language in which these problems are stated.

PHP 4788 PHILOSOPHY OF MARXISM - 6A - XMW
A critical survey of Marxist philosophy from Marx and Engels to Mao Tse-Tung and Herbert Marcuse. Hegelian foundations of Marxist philosophy analyzed in detail.

WST 4342 CLASSICS IN FEMINIST THEORY - XMW
A study of classic contributions to the elaboration of feminist thought from the 18th century to the present in an attempt to discover the roots of the contemporary feminist movement. (May also be taken for credit in Women's Studies.)

PHYSICS

PHY 2020 CONCEPTUAL PHYSICS - NS
A qualitative, non-mathematical investigation of physics, emphasizing its influence on life today. (No credit for Physics or Mathematics majors.)

PHY 2038 ENERGY AND HUMANITY - NS
Social, economic, and political aspects of energy. Includes energy conservation, environmental impact, energy-source alternatives, changing lifestyles, and personal use of solar energy. The relevant basic laws of physics and the scientific method are emphasized. Field trips and audiovisual presentations play important roles.

PHY 3048, 3048L GENERAL PHYSICS AND LABORATORY (3, 1)
PR: MAC 3281 or MAC 3311. First semester of a two semester sequence of general physics (mechanics, wave motion, sound, thermodynamics, geometrical and physical optics, electricity, and magnetism) and laboratory for physics majors and engineering students. Must be taken concurrently with PHY 3048L. May not receive credit for both the PHY 3053 and PHY 3048 courses.

PHY 3048L GENERAL PHYSICS AND LABORATORY (3, 1)
PR: MAC 3282 or MAC 3312. Second semester of general physics and laboratory for physics majors and engineering students. Must be taken concurrently with PHY 3048, then dropped simultaneously. May not receive credit for both the PHY 3054 and PHY 3048L courses.

PHY 3053, 3053L GENERAL PHYSICS AND LABORATORY (3, 1)
First semester of a two semester sequence of general physics (mechanics, heat, wave motion, sound, electricity,
PHYS 3221 MECHANICS I
CR: MAC 3283 or MAC 3313 and either PR: PHY 3048 or PHY 3101. First semester of a two semester sequence. Review of vector algebra and vector calculus. Dynamics of single particles and systems of particles; central forces; rotation about an axis; statics; and virtual work.

PHYS 3323C ELECTRICITY AND MAGNETISM I
PR: PHY 3049, MAC 3313. Electrostatics, fields and potentials, dielectrics, classical conductivity, RC circuits, Fourier and finite element methods. Laboratory. First semester of sequence PHY 3323C, PHY 4324C.

PHYS 3424 OPTICS
PR: PHY 3101 or PHY 3049 or equivalent; CR: PHY 3101. Reflection, refraction, dispersion, interference, diffraction, polarization, and laboratory.

PHYS 3822L INTERMEDIATE LABORATORY
PR: PHY 3101 or PHY 3049 or equivalent; CR: PHY 3101. Experiments in modern physics, including the area of atomic, nuclear, solid state and wave phenomena.

PHYS 4031 GREAT THEMES IN PHYSICS - SA - XMW

PHYS 4222 MECHANICS II
PR: PHY 3221; CR: MAP 4302. Continuation of PHY 3221. Coupled oscillators and normal modes; moving coordinate systems; Lagrange's and Hamilton's equations; inertia tensor; general rotation of rigid bodies.

PHYS 4324C ELECTRICITY AND MAGNETISM II
PR: PHY 3323C, CR: MAP 4302. Introduction to special relativity, magnetic fields and potentials, magnetic materials, RL and RLC circuits, Maxwell's equations and applications. Laboratory. Second semester of sequence PHY 3323C, PHY 4324C.

PHYS 4523 STATISTICAL PHYSICS
PR: PHY 3101 or CR: A statistical approach to thermostatistics and kinetic theory and introduction to statistical mechanics.

PHYS 4604 INTRODUCTION TO QUANTUM MECHANICS
PR: PHY 3101, or CR: Basic concepts of quantum mechanics with applications in atomic, nuclear, and condensed matter physics.

PHYS 4744C INTRODUCTION TO ELECTRONICS AND TEST INSTRUMENTATION
PR: General Physics or CR: Introduces the fundamentals of analog and digital electronics used in measurements and instrumentation. Weekly labs give hands-on experience in breadboarding electronic circuits and using test instrumentation (oscilloscopes, digital multimeters, etc.). (Not for major credit).

PHYS 4823L ADVANCED LABORATORY
PR: PHY 3822L. Experimental work primarily related to nuclear physics. Emphasis on modern physical experimental techniques employing some of the new types of equipment.

PHYS 4905 INDEPENDENT STUDY
PR: CI. Specialized, independent study determined by the student's need and interest. The written contract required by the College of Arts and Sciences specifies the regulations governing independent study. May be repeated. (S/U only.)
CPO 5934 SELECTED TOPICS IN COMPARATIVE POLITICS (3)
Studies specific substantive areas in comparative politics such as political economy or the politics of specific countries or regions. May be repeated for credit as topics vary.

INR 3003 INTRODUCTION TO INTERNATIONAL RELATIONS (3)
Concepts and analytical tools applied to events such as politics among nations, control of foreign policies, types of actors, war and peace.

INR 3102 AMERICAN FOREIGN POLICY (3)
Analysis of the development and scope of United States foreign policy, emphasizing goals and objectives, policy formulation and implementation, themes and issues.

INR 4035 INTERNATIONAL POLITICAL ECONOMY (3)
Analysis of the development and politics of the international economic system, focusing on questions of cooperation and conflict in trade, aid, and investment relationships.

INR 4254 AFRICA IN WORLD AFFAIRS (3)
An examination of Africa's place and role in world affairs including an analysis of the impact of external forces, international relations in post-colonial Africa, the relations of African states with the major World Powers, the UN and its agencies.

INR 4334 DEFENSE POLICY (3)
Analytic institutional factors contributing to formulation of defense policy and the impact of such policy on international relations.

INR 4403 INTERNATIONAL LAW (3)
Examines essential components of the international legal system: recognition; succession; sea, air and space law, treaties, diplomats, International Court of Justice; laws of war, etc. Introduces the student to legal reasoning as employed in the international context.

INR 4502 INTERNATIONAL ORGANIZATIONS -SS-AF (3)
Study of the operations and structure of international organizations and effects on world politics; background and achievement of the UN; regional organizations and multi-national corporations.

INR 5086 ISSUES IN INTERNATIONAL RELATIONS (3)
Explore specific topics and provides the student with an opportunity for in-depth study of historical and contemporary problems in international politics. May be repeated for credit as topics vary.

POS 2041 AMERICAN NATIONAL GOVERNMENT (3)
Analysis of basic principles and procedures of the American governmental system with emphasis on current issues and trends.

POS 2080 THE AMERICAN POLITICAL TRADITION -SS-HP (3)
This course is an introductory survey of the historical developments and changes in American political institutions, processes, and thought.

POS 2112 STATE AND LOCAL GOVERNMENT AND POLITICS (3)
Analysis of the structure and function of state and local governments, of the social and political influences that shape them, and of the dynamics of their administrative processes.

POS 3142 INTRODUCTION TO URBAN POLITICS AND GOVERNMENT (3)
Governmental and political structures and processes as they function in urban areas, with special focus on municipalities and locally based public services.

POS 3145 GOVERNING METROPOLITAN AREAS (3)
Examines governmental units and interactions in metropolitan areas, proposals for changes in governance, and policy areas of worldwide concern, such as human services.

POS 3173 SOUTHERN POLITICS (3)
Examines changes in electoral politics in the South, and the role of interest groups and the state and federal government in facilitating change.

POS 3182 FLORIDA POLITICS AND GOVERNMENT (3)
A study of Florida political culture, political parties and elections, the legislative, executive, and judicial systems, and policy patterns.

POS 3273 PRACTICAL POLITICS (3)
PR: POS 2041 or POS 3453 or CI. Coordinated scholarly and practical activity through class lecture and supervised field work in local political parties and election campaigns.

POS 3283 JUDICIAL PROCESS AND POLITICS (3)
The organization, development, and functioning of American court systems and the causes and consequences of judicial behavior from an empirical perspective.

POS 3453 POLITICAL PARTIES AND INTEREST GROUPS (3)
Analysis and understanding of role, functions, structure, and composition of such, and their impact on American governmental institutions.

POS 3691 INTRODUCTION TO LAW AND POLITICS (3)
Nature of law, legal process, relationship to political life of constitutional law, administrative law, the judicial process, and private law.

POS 3697 ENVIRONMENTAL LAW (3)
This course examines some of the major issues involving environmental law. Specially, the course provides a survey and analysis of statutes, both state and federal, regulating water, air, soil pollution, and resource conservation and recovery. The course will also address questions pertaining to problems of implementation, interpretation, enforcement, and development of environmental laws.

POS 3713 EMPIRICAL POLITICAL ANALYSIS (3)
Fundamentals of empirical political inquiry: systematic data collection and quantitative analysis techniques. Laboratory exercises using the computer are required.

POS 3931 SELECTED TOPICS (3)
Selected topics in political science with course content based upon student demand and instructor's interest. May be repeated for up to 6 credits as topics vary.

POS 4163 COMMUNITY LEADERS AND POLITICS (3)
Analysis of the roles and powers of mayors, city managers, council members, and interest and ethnic groups; distribution of community power.

POS 4204 POLITICAL BEHAVIOR, PUBLIC OPINION, AND ELECTIONS (3)
Analysis of economic and socio-psychological factors influencing mass and elite political behavior; voting behavior, public opinion, and political activism.

POS 4413 THE AMERICAN PRESIDENCY-6A (3)
The presidency as a political institution; analysis of powers, legislative, administrative, political, and foreign policy leadership; crisis management and decision making; White House staffing; limits on power.

POS 4424 THE AMERICAN CONGRESS (3)
Organization, procedures, committee system, party leadership, relations with governmental and nongovernmental organizations and agencies, oversight, decision-making processes, House/Senate comparisons.

POS 4614 CONSTITUTIONAL LAW I (3)
PR: POS 2041. Leading social problems, principle institutions, and the scope of powers. Analysis of Supreme Court decisions, scholarly commentaries, and the writings of leading public figures.

POS 4624 CONSTITUTIONAL LAW II (3)
PR: POS 2041. Analysis of Supreme Court decisions and scholarly commentaries on the constitutional rights of individuals.

POS 4693 WOMEN AND LAW I (3)
Introduction to issues concerning the legal aspects of sex and sex-based discrimination as embodied in statutory and case law, focusing on constitutional and family law and reproductive freedom issues. (May also be taken for credit in Women's Studies.)

POS 4694 WOMEN AND LAW II -WMW (3)
PL: POS 4693 or CI. Legal position of women in American society and remedies available to challenge current laws and practices, with specific emphasis on employment and education issues as they relate to both women and men. (May also be taken for credit in Women's Studies.)

POS 4800 INDEPENDENT STUDY (1-3)
PR: A 3.0 average in Political Science and CI. Specialized study determined by the student's needs and interests. (S/U only.)
POT 4104 SENSORY PROCESSES (3) Analysis of basic psychological ideas of Machiavelli, Hobbes, Locke, Rousseau, Burke, and other modern philosophers.

POT 4936 SELECTED TOPICS IN POLITICAL THEORY (3) Selected topics or thinkers in political theory.

POT 9126 ISSUES IN POLITICAL PHILOSOPHY AND LAW (3) PR: Graduate or senior standing and CI. Selected topics in political philosophy and law. May be repeated as topics vary.

PUP 4402 PUBLIC POLICY (3) Examines the formation and implementation of public policy in areas such as health, economics, education, etc.

PUP 4403 ENVIRONMENTAL POLITICS AND POLICY (3) Examines the politics of environmental issues, formation and implementation of environmental policy.

PUP 4932 WOMEN AND POLITICS -6A -XMW (3) An analysis of the impact of gender on power and influence in American society, and women's changing role in the political process. (May also be taken for credit in Women's Studies.)
EXP 4840 PSYCHOLOGY OF LANGUAGE
Historical survey of relations between psychology and linguistics leading to the emergence of psycholinguistics as a field of study. Current status of theory and research in the field.

INP 3101 APPLIED PSYCHOLOGY -SS
The application of psychological principles and the functions of psychologist in education, government, industry, and clinical practice.

INP 4004 INDUSTRIAL PSYCHOLOGY
PR: PSY 3213 with a grade of C or better, psychology major or CI. Topics include: selection, training, motivation, job satisfaction, supervision, decision-making.

PPS 4013C PHYSIOLOGICAL PSYCHOLOGY
PR: PSY 3213 with a grade of C or better, psychology major or CI. Gross neural and physiological components of behavior. Structure and function of the central nervous system and theory of brain functions.

PSY 2012 AN INTRODUCTION TO CONTEMPORARY PSYCHOLOGY -SS
A broad survey of psychology for both majors and non-majors with special emphasis on the more applied areas of psychology (e.g., social psychology, abnormal psychology, personality, and developmental psychology.)

PSY 3022 CONTEMPORARY PROBLEMS IN PSYCHOLOGY -SS
The content of this course varies depending on the needs and interest of students and faculty. Offerings include in-depth coverage of specialized aspects of psychology applied to contemporary problems not studied in general introductory courses.

PSY 3044 EXPERIMENTAL PSYCHOLOGY -SS
PR: PSY 3213, with a grade of C or better, psychology major or CI. Designed as an in-depth examination of the basic principles and concepts of psychological science. Extensive coverage will be given to the areas of learning, perception, physiological psychology, and cognition.

PSY 3213 RESEARCH METHODS IN PSYCHOLOGY
PR: PSY 3044, psychology major, or CI. This course considers the logic of experimental design, concept of control and the analysis of experimentally obtained data. The laboratory sessions provide experience applying the concepts discussed in lecture. Two lectures plus two-hour lab. May be taken concurrently with PSY 3044.

PSY 4205 EXPERIMENTAL DESIGN AND ANALYSIS
PR: PSY 3213 with grade of C or better, psychology major, or CI. Detailed coverage of those research designs and statistical techniques having the greatest utility for research problems in psychology. Emphasis on topics from analysis of variance.

PSY 4604 HISTORY AND SYSTEMS OF PSYCHOLOGY
PR: PSY 3213 with a grade of C or better, psychology major or CI. The historical roots of modern psychological theories, investigation of the various schools of psychology such as behaviorism, Gestalt psychology, psychoanalysis, and phenomenological psychology.

PSY 4913 DIRECTED STUDY
PR: Upper-level standing, psychology major and CI. The student plans and conducts an individual research project or prepares for directed readings under the supervision of a faculty member. (S/U Only.)

PSY 4931 SELECTED TOPICS: SEMINAR
PR: Upper-level standing, psychology major and CI. Graduate-type seminar designed to provide the advanced undergraduate student with an in-depth understanding of a selected sub-area within psychology. May be repeated with a maximum of six (6) hours credit for the major.

PSY 4932 HONORS SEMINAR
PR: Admission to honors program in psychology and CI. The student, under supervision of a faculty member, will formalize, conduct, analyze, and report in writing a research project in psychology. May be repeated with a maximum of 6 hours credit. May not count for major credit.

PSY 4970 HONORS THESIS
PR: Admission to honors program in psychology and CI. The student under supervision of a faculty member will formalize, conduct, analyze, and report in writing a research project in psychology. May be repeated with a maximum of 6 credit hours.

SOC 3742 PSYCHOLOGY OF WOMEN -SS
An examination of theories of female personality in historical perspective. Current research on sex differences, socialization, sexuality, psychology of reproduction. Emerging roles of women as related to social change and developmental tasks of the life cycle. (Also offered under Women's Studies.)

SOC 4004 SOCIAL PSYCHOLOGY
PR: PSY 3213 with a grade of C or better, psychology major or CI. Survey of methods, empirical findings, and theoretical interpretations in the study of an individual's behavior as it is affected by others.

SOC 4714C ENVIRONMENTAL PSYCHOLOGY
PR: PSY 3213 with a grade of C or better, psychology major or Cl. Explores the influences of environment on behavior. Topics considered include crowding, privacy, territorial behavior, environmental design, and pollution effects. Designed for both psychology majors and non-majors.

PUBLIC ADMINISTRATION
PAD 3003 INTRODUCTION TO PUBLIC ADMINISTRATION -SS
Examination of organizational behavior and change, policy process, public management, financial administration, and personnel management from the perspective of public and social delivery.

PAD 4204 PUBLIC FINANCIAL ADMINISTRATION
Analysis of problems in the growth and development of public budgetary theory and Federal budgetary innovations.

PAD 5035 ISSUES IN PUBLIC ADMINISTRATION AND PUBLIC POLICY
Selected issues and topics in Public Administration and Public Policy. May be repeated for credit as topics vary.

PAD 5333 CONCEPTS AND ISSUES IN PUBLIC PLANNING
PR: URP 4050 or URP 6056. Analysis of basic concepts, issues, and strategies of planning; policy determination, collection of information, and decision-making.

PAD 5606 ADMINISTRATIVE LAW
An analysis of the constitutional and statutory bases and limitations of the administrative process, administrative adjudication, rule making, and the judicial review of such actions.

PAD 5612 ADMINISTRATIVE REGULATION
Analysis of the regulatory functions and processes in the American political system: regulatory commissions, their functions, powers, management, reforms, and relationship with other branches of government.

PAD 5700 RESEARCH METHODS IN PUBLIC ADMINISTRATION
This course provides the student with the fundamental skills and knowledge of how research is designed, implemented, analyzed, and utilized in public sector agencies. Available to majors and non-majors.

PAD 5807 ADMINISTRATION OF URBAN AFFAIRS
Analysis of the role of the administrator at the municipal level; the division of functions; policy formation; alternative governmental structures; effects on the administrative process.

PAD 5835 COMPARATIVE PUBLIC ADMINISTRATION
How organizations and managers perform within a particular environment, potential impact of innovation, and how service is accomplished in a variety of socio-economic environments.
REHABILITATION COUNSELING

RCS 3030 REHABILITATION COUNSELING: CONCEPTS AND APPLICATIONS (3)
This introductory course (1) surveys the theories, concepts, and attitudes involved in helping disabled or unable persons become increasingly able. (2) provides initial experiences with these counseling perspectives and methods and their personal application.

RCS 5080 MEDICAL ASPECTS OF DISABILITY (4)
PR: CI. RCS 5700. A survey of medical conditions and disabilities encountered by rehabilitation and mental health counselors. Examines the relationship of client handicaps, physical and mental, to rehabilitation and mental health programming.

RCS 5404 INTERPERSONAL COUNSELING I: PERSONALITY THEORY (4)
A skill-building course on the utilization of one's self in rehabilitation and mental health counseling relationships. Includes the study of personality theories and their contribution to successful counseling and rehabilitation practice.

RCS 5406 SEMINAR I: HUMAN DEVELOPMENT THEORY IN COUNSELING (3)
Human development theory as applied in psychotherapy and case management rehabilitation mental health and addiction settings.

RCS 5450 THEORETICAL ISSUES IN APPLIED ALCOHOL ADDICTION IN REHABILITATION COUNSELING (4)

RCS 5700 FOUNDATIONS AND ETHICS (4)
An overview of rehabilitation history and introduction to rehabilitation processes and ethical issues in the public and private sectors. Ethical, legal, and professional standards in rehabilitation and mental health counseling are emphasized.

RCS 5802 PRACTICUM I (1) Supervised experience and practice in counseling in various rehabilitation and mental health settings for a minimum of 120 hours.

RCS 5905 DIRECTED STUDIES (1-4) Supervised rehabilitation studies under the direction of a faculty member.

RELIGIOUS STUDIES

CLA 3000 ANCIENT CIVILIZATIONS (4)
Study of the character, ideas, and cultural achievements of the peoples of the Ancient Middle East and Mediterranean and their relevance for modern Western civilization.

CLA 3001 HISTORY OF THE ALPHABET (2) Study, in reasonable detail, of the evolution of our "Roman" alphabet, as well as of other ancient and modern alphabets, from the writing system of ancient Egypt.

CLA 4160 EGYPTIAN CIVILIZATION (3) Study of the Ancient Egyptian civilization, including customs, religion, art and architecture, language and literature, science and the calendar, and an introduction to hieroglyphic writing. (Alternate years.)

CLA 4171 MESOPOTAMIAN CIVILIZATION (3) Study of the Ancient Mesopotamian (Sumero-Babylonian) civilization, including customs, religion, art and architecture, languages and literatures, science and the calendar, and an introduction to cuneiform writing.

CLA 4930 SELECTED TOPICS (1-4) Course contents depend on student demand and instructor's interest and may range over the whole field of Ancient languages, literatures, and civilizations. Offerings on a semi-regular basis include Tongues of the Bible (2), and The Bible as History (3). Note: In any of the numbers CLA 4900, CLA 4930, enrollment is repeatable for different subject matters.


HEB 1120, 1121 BASIC HEBREW I, II (4, 4) Designed to give students a working knowledge of Classical (Biblical) Hebrew and to introduce them to the Biblical literature in the original language.

REL 2300 INTRODUCTION TO WORLD RELIGIONS -6A - HP (4) A cross-cultural exploration of the major religions of the world through lectures, films, and the reading of key religions. Religions covered include Judaism, Christianity, Islam, Taoism, Confucianism, Hinduism, and Buddhism.

REL 2306 CONTEMPORARY WORLD RELIGIONS - HP (4) This course will explore the unity and diversity of religious traditions in a global context in order to understand the mutual interactions between religions and cultures. Emphasis will be placed on the role of religions in shaping human values which can either create or resolve social conflicts, and the impact these values can have on issues of race, ethnicity and religious diversity in a multicultural world.

REL 2310 HISTORY OF CHRISTIANITY-6A - HP (4) The historical development of Christianity, its ideas and institutions, from the first century to the rise of religious modernism in the 19th century.

REL 3003 INTRODUCTION TO RELIGION (3) This course examines the phenomenon of religion to answer the question: Religious w h at is it? Religious thought (mythology and theology) and religious behavior (ritual and morality) are closely examined.

REL 3114 COMEDY, TRAGEDY, AND RELIGION -6A -XMW (3) Examines the visions of life in comedy and tragedy, and relates both to Judaism, Christianity, and Zen Buddhism.

REL 3120 RELIGION IN AMERICA (3) To explore the movement from state church to pluralism in American religious institutions, the religious results of non-Protestant immigration; the Jewish factor; the effect of home missions and social concern programs upon American life; political entanglements and the concept of church/state separation.

REL 3131 NEW RELIGIONS IN AMERICA (3) A course designed to allow the student to survey the wide spectrum of contemporary sects and cults and learn what motivates their development.

REL 3132 WITCHCRAFT AND PAGANISM IN AMERICA (3) A study of contemporary witchcraft and paganism, including theories, methods, history, myths and symbols, beliefs, rituals and practices, believers, recruitment, socialization, and organizations.

REL 3145 WOMEN AND RELIGION -6A (3) Analysis of the status and roles of women as compared to men in the Judeo-Christian tradition. Contemporary issues of feminist theology, and the controversies surrounding them. (May also be taken for credit in Women's Studies.)

REL 3146 THE RELIGIOUS QUEST IN CONTEMPORARY FILMS -6A -SS - HP (4) This course will use contemporary films such as Gandhi, Malcolm X, The Long Walk Home, The Color Purple, The Leap of Faith, The Chosen, and Grand Canyon, to explore the personal and social dimensions of religion in modern secular societies, with an emphasis on issues of racism, sexism and human liberation and reconciliation.

REL 3150 RELIGION AND THE MEANING OF LIFE -6A -XMW (3) What is the meaning of life? An exploration of answers to this question in Eastern and Western religions, and in humanistic philosophies of life.

REL 3155 LIFE AFTER DEATH (3) An exploration of ideas about life after death and its relations to this life, in Judaism, Christianity, Islam, Hinduism, and Buddhism.

REL 3170 RELIGION, ETHICS AND SOCIETY THROUGH FILM -6A -HP -SS (4) An ethical analysis of contemporary social issues through
contemporary films, drawing on religious narrative traditions from Eastern and Western cultures which have contributed to the development of an ethic of human dignity, human rights and human liberation after Auschwitz and Hiroshima.

**REL 3210 HEBREW BIBLE/OLD TESTAMENT**
An introduction to the critical study of the Hebrew Scriptures against the background of the ancient Near East, with attention to the history and religion of the Hebrew people.

**REL 3240 INTRODUCTION TO THE NEW TESTAMENT**
An introduction to the critical study of the New Testament in context of Christian beginnings in the first century A.D.

**REL 3280 BIBLICAL ARCHAEOLOGY - XMW**
An in-depth examination of the archaeological data relating to the background and content of the Bible, including ancient customs, Biblical sites and cities, Biblical history, and material culture of the Biblical period. Special attention will also be given to excavation methods and interpretation of archaeological evidence.

**REL 3310 WORLD RELIGIONS**
An introduction to and a comparison of the ideas, the literature and institutions of the major religions of the world including Christianity, Judaism from the Near East, and Hinduism, Taoism, Confucianism, and Buddhism from the Far East. General comparison of Western and Eastern beliefs.

**REL 3330 THE RELIGIONS OF INDIA - AF - SS**
All religions of the world came to India and all became Indian. What is this "Indianness" which stems from Hinduism, Buddhism, Jainism, and Sikhism, but extended itself to include Judaism, Christianity, Islam, Zoroastrianism and Baha'i. Readings from classical texts and modern literature.

**REL 3367 ISLAM IN THE MODERN WORLD**
Examines the major developments in Islamic thought since the 13th century, with emphasis on the 19th and 20th century Islamic resurgence. Issues of diversity, gender, and social values will be stressed.

**REL 3420 CONTEMPORARY RELIGIOUS THOUGHT**
An examination of the central ideas of recent theological thinkers; such men as Barth, Brunner, Bultmann, Bonhoeffer, Rahner, Tillich, Cox, Altizer, Buber, Niebuhr.

**REL 3550 ROMAN CATHOLICISM - 6A - XMW**
An examination of the history, doctrine, and ethics of the Roman Catholic Church.

**REL 3600 INTRODUCTION TO JUDAISM - 6A - AF**
An introduction to Judaism: its religious tenets; its codes of ethical living and customs. This course is intended as a description of what it means to be a Jew.

**REL 3602 CLASSICS OF JUDAISM - 6A**
PR: One course in Religious Studies. How to read the principal documents of Judaism beyond the Old Testament, particularly the Mishnah, Talmuds, and Midrash.

**REL 3611 HISTORY OF JUDAISM**
A study of the evolution of the religion of ancient Israel from the Exodus to the end of the second century of our era, seen against the background of its historical, geographical, political, social, and spiritual setting.

**REL 3613 MODERN JUDAISM**
A study of Jewish life in the West since 1789, emphasizing Jewish beliefs, practices, and institutions.

**REL 3700 INTRODUCTION TO ISLAM - 6A - HP - AF**
This course introduces the basic elements of Islamic belief and practice, placing the rise of Islam in its historical context in the Middle East, and stressing issues of diversity (including ethnicity and gender).

**REL 3900 DIRECTED READINGS**
PR: CI. Individual guidance in concentrated reading on a selected topic.

**REL 3921 COLLOQUIUM**
This colloquium will be held at least 3 times each semester in order to bring all religious studies faculty and undergraduate majors together to discuss research of a particular faculty member, student, or guest scholar. May be repeated up to 3 semester hours. (S/U only)

**REL 3936 SELECTED TOPICS**
PR: CI. Course contents depend on students' needs.

**REL 4113 THE HERO AND RELIGION - XMW**
A study of the way in which embedded religious models help to fashion the representation of an heroic protagonist. The focus of the course will be on the relationship between the hero and the "other," as differentiated by race, gender, ethnicity, or merely inner being.

**REL 4133 MORMONISM IN AMERICA**
A study of Mormonism in America as an example of a new religion. Includes the study of history, myths and symbols, texts, beliefs, rituals and practices, believers, recruitment, socialization, and organizations.

**REL 4161 RELIGION, TECHNOLOGY AND SOCIETY**
An exploration of the way in which religion and technology have interacted in Western civilization so as to both express and transform human values and identity. Special emphasis will be given to the value questions raised by modern technology.

**REL 4171 CONTEMPORARY CHRISTIAN ETHICS - 6A**
PR: Jr. standing or CI. This course will survey several major approaches to contemporary Christian ethics and their application to a number of ethical issues peculiar to personal and social life in contemporary society.

**REL 4193 COMPARATIVE MYSTICISM**
A course designed to acquaint the student with the nature of mystical experience, and some of the varieties of mystical experience recorded in the writings of the mystics.

**REL 4221 WHO WROTE THE BIBLE - (GENESIS-KINGS) - 6A - XMW - XLW**
A critical examination of Genesis through 2 Kings. This course focuses on the history of the formation of the text and the development of the religious traditions represented therein. Special attention will be paid to Israelite Law, Covenant Theology, and the history of the religion(s) of the Children of Israel in their Ancient Near Eastern context.

**REL 4224 HEBREW BIBLE II/PROPHETS AND WRITINGS**
PR: REL 3210 or REL 4221 or CI. An investigation of the prophetic movement and the historical and cultic writings in Israel from the point of view of theological developments, history presupposed, and the religious institutions depicted. Special attention is given to a theme such as Job and the problem of evil.

**REL 4244 NEW TESTAMENT I: GOSPELS, ACTS**
An exploration of the Gospels and Acts, including their backgrounds in Judaism and pagan religion, literary and form criticism, historical Jesus research, and the social history of earliest Christianity.

**REL 4250 JESUS' LIFE AND TEACHINGS**
PR: CI. An examination of the various historical studies made in the quest of identifying Jesus as an historical figure. The concern is to make a reasonable assessment of who Jesus was and what he was saying to the Jews in Palestine at the beginning of the common era.

**REL 4252 NEW TESTAMENT II: THE LETTERS OF PAUL AND OTHER NEW TESTAMENT WRITINGS**
PR: REL 4244 or REL 3240 or CI. An investigation of the phenomenon of earliest Christianity in its Pauline and non-Pauline forms, particularly as reflected in Paul's letters and in other writings of the New Testament. Special attention is given to the program of Apocalyptic, as in the book of Revelation.

**REL 4333 HINDUISM**
The philosophy of the saints; the complex rituals of the Brahmins; the art of its temples; the psychology and physiology of yoga; the social rigidity of the caste system; the esoteric science of meditation; the ascetic activism of Mahatma Gandhi—all of these are Hinduism, and more. Close readings of classical texts, philosophic systems and meditative poems.

**REL 4343 BUDDHISM IN INDIA, SRI LANKA, AND SOUTH EAST ASIA**
The life and teachings of the Buddha; the order of monks and nuns; the Buddhist Emperor Ashoka; schisms; the rise of the
Great Vehicle and the philosophy of emptiness; Buddhist missions; Buddhist art and culture; Buddhism and national liberation; contemporary social and political issues.

REL 4344 BUDDHISM IN CHINA, JAPAN, AND TIBET (4)
Maya D. Buddhism followed the Silk Roads to China and Japan, and later it crossed the Himalayas into Tibet. An overview of the variety of schools and practices of Buddhism and its adaptation by these ancient cultures.

REL 4508 FROM MYTH TO CHRISTIANITY (4)
Study of the religions/mythologies of the ancient Middle East and Eastern Mediterranean and how their influences shaped the theology and practices of Christianity up to the end of the fourth century; influences of many of which continue to be evident in the traditional Roman and Eastern Orthodox churches.

REL 4626 REASON IN RELIGION: TALMUDIC LOGIC -XMW (3)
Analyzes the modes of thought and of logical analysis of the Talmud of Babylonia; the way in which applied logic and practical reason work in a religious definition of the social order; the dialectical argument.

REL 4670 JUDAISM AND CHRISTIANITY AFTER THE HOLOCAUST -4A-XMW- XLW (4)
This course will explore the impact of the Holocaust on Jewish and Christian thought and identity in the light of the history of religious and cultural anti-semitism in Western civilization.

SOW 3302 INTRODUCTION TO SOCIAL WORK (3)
An introductory course tracing the development of social work as a profession including an examination of the knowledge, skill and attitudinal base of the profession and professional roles and functions.

SOW 3401 RESEARCH AND STATISTICS FOR SOCIAL WORK (4)
PR: All pre-core courses restricted to Social Work majors, others by School permission. The purpose of this course is two-fold: to familiarize the student with research as it is practiced in the profession of Social Work; and to equip the student with those theoretical understandings necessary to be a critical consumer of social work research.

SOW 3415 SOCIAL WORK PRACTICUM PROGRAM (4)
PR: All pre-core courses. Restricted to Social Work majors, others by School permission. An advanced policy course taking an analytical approach to contemporary social welfare policy issues and current social welfare programs.

SOW 4341 MULTI-METHODS OF SOCIAL WORK PRACTICE I: MICRO-SYSTEM INTERVENTION (5)
PR: All pre-core courses, SOW 4341; SOW 4233, and SOW 3102 may be taken as PR or CR. Restricted to Social Work majors, others by School permission. Second practice course emphasizing intervention at the community and organizational level. Builds upon theoretical and practical content of SOW 4341. Course includes both didactic and experiential learning components.

SOW 4510 FIELD PLACEMENT (9)
PR: Completion of all social work core courses except SOW 4522. Restricted to social work majors in Senior year. Supervised field placement in a social welfare organization consisting of 32 hours per week in the field and 4 hours per week in an integrated practice seminar which constitutes the third and final course in the practice sequence.

SOW 4522 MULTI-CULTURAL AMERICA (3)
PR: SOW 4510 is taken as CR for Social Work majors. This course is taken as the final course in the BSW curriculum for majors. The course focuses on the students' understanding of multicultural and intergenerational issues.

SOW 4900 DIRECTED READINGS (1-6)
PR: Completion of four social work courses including SOW 3401, upper level standing, and School permission. Content dependent upon student interest and ability. A contract will be jointly developed by student and instructor specifying nature of work to be completed. May be repeated up to 6 credit hours.

SOW 4930 VARIABLE TOPICS IN SOCIAL WORK (1-3)
Restricted to Social Work majors; others by School permission. Variable title courses to expand on the four sequence areas in the Social Work core curriculum. Allows focus on areas relevant to student's educational interest.

SOW 5930C SELECTED TOPICS IN SOCIAL WORK (1-4)
Restricted to Social Work majors, both graduate and undergraduate; others by School permission. Course is taken as an elective. Variable title courses will selectively expand specific social work content areas. May be repeated in varying topic areas.

SOCIOLGY

SYA 3010 CLASSICAL THEORY (3)
PR: SYG 2000 or CR. Examination, comparison, and critical analysis of the classical theoretical perspectives in Sociology.

SYA 3015 CONTEMPORARY THEORY (3)
PR: SYA 3010 and SYG 2000 or CR. This course examines some of the key sociological traditions since WWI which have emphasized the relationship between symbolic interactions, lived experience, popular culture, and social structures.
research; and analyzing and interpreting quantitative data.

SYA 3310 QUALITATIVE METHODS - 6A-XMW (3)
PR: SYG 2000 or Cl. Examination of the techniques of planning and conducting qualitative research; and analyzing and interpreting qualitative data. Majors only. Permit required.

SYA 3503 VISUAL SOCIOLOGY (3)
PR: SYG 2000 or Cl. SYA 3504. A hands-on investigation of the relationship between visual representation (especially photography) and our understanding of the social world.

SYA 3504 VISUAL SOCIOLOGY LABORATORY (1)
PR: SYG 2000 and CR: SYA 3503 or Cl. Practical application of photographic techniques explored in SYA 3503. Does not count toward the major or minor in Sociology (S/U only).

SYA 4430 COMPUTERS IN THE SOCIAL SCIENCES (3)
Introduction to the uses of computers in sociological research. Major emphasis is upon the use of statistical packages (primarily SPSS) in data analysis.

SYA 4910 INDIVIDUAL RESEARCH (1-3)
PR: Four courses in sociology, including SYA 3300, upper level standing, at least 3.0 overall GPA, or Cl. Content dependent upon interest and competence of student. A contract specifying the work to be done must be completed and signed by both the student and the chairperson of the department before registration for this course will be permitted. May be repeated for credit. Up to 3 credits may be counted towards meeting major electives requirement.

SYA 4930 TOPICS IN SOCIOLOGY (3)
PR: SYG 2000 or Cl. May be repeated for credit. See class schedule for content.

SYA 4935 SENIOR SEMINAR - XMW (3)
PR: Senior standing, SYG 2000, SYA 3010, SYA 3015, SYA 3300, SYA 3310 plus 6 hours of sociology electives. Course stresses application of theory and methods to specific topics in sociology. Majors only. Permit required.

SYA 4949 SOCIOLOGICAL INTERNSHIP (1-6)
PR: Senior or graduate standing in Sociology plus Cl. Supervised placement in community organization or agency for a minimum of 10 hours of volunteer work per week, and a weekly seminar on applying sociological skills and methods in the placement setting. May be repeated up to 6 credit hours. (S/U only.)

SYD 3441 PEASANT PERSPECTIVES - AF (3)
PR: SYG 2000 or 8 hrs. of other Social Science Gen. Ed. Course Work. Examines the applicability of sociological concepts to peasant life around the world, and explores the roles played by "Western" societies in creating and sustaining the conditions under which peasants live.

SYD 3700 RACIAL AND ETHNIC RELATIONS (3)
PR: SYG 2000 or Cl. Comparative study of inter-racial relations, social tensions, attitudes, and modes of adjustment in various societies.

SYD 4020 GLOBAL POPULATION (3)
PR: SYG 2000 or Cl. Upper level standing. Sociological determinants of fertility, mortality and migration; theories of population change.

SYD 4410 URBAN SOCIOLOGY (3)
PR: SYG 2000 or Cl. Upper-level standing. The social structure of the community in modern industrial societies. Analysis of community change.

SYD 4800 GENDER AND SOCIETY (3)
PR: SYG 2000; WST 2010 or 2011; or Cl. Historical and contemporary exploration of current issues related to sex roles in America. Emphasis on sex role differences, interpersonal relationships and institutional participation. (Also offered under Women's Studies.)

SYG 2000 INTRODUCTION TO SOCIOLOGY - SS (3)
Nature and application of sociological concepts, theories, and methods. Analysis of societies, associations and groups, social processes and social change.

SYG 2412 MARRIAGE (3)
Study of pre-marital relations. Social, cultural, and personal factors related to success and failure in mate selection and marriage. Does not count for sociology major credit.

SYG 3010 CONTEMPORARY SOCIAL PROBLEMS - SS (3)
Application of sociological concepts and principles to the description and analysis of major social problems of modern societies. Does not count for sociology major credit.

SYO 3120 THE FAMILY (3)
PR: SYG 2000 or Cl. Principles of family organization, social adjustment, and control. Maturation, socialization, and stability of the family.

SYO 3200 SOCIOLOGY OF RELIGION (3)
PR: SYG 2000 or Cl. Types, sources, and functions of religious behavior. Religious behavior in relation to other aspects of personality and culture.

SYO 3500 SOCIAL ORGANIZATION (3)
PR: SYG 2000 or Cl. Social organization in the broadest sense, including institutions and associations, as well as variations in role and status.

SYO 3530 SOCIAL STRATIFICATION (3)
PR: SYG 2000 or Cl. Social status and social stratification, social class as a factor in behavior, social mobility.

SYO 4300 POLITICAL SOCIOLOGY (3)
PR: SYG 2000 or Cl. An examination of the social factors that affect government, politics, and political behavior.

SYO 4370 OCCUPATIONS AND PROFESSIONS (3)
PR: SYG 2000 or Cl. A comparative analysis of professions, particularly medicine, law, teaching, allied health professions, engineering. Focus on process professionalizing service occupations like policeman, business management, public administration and social work.

SYO 4400 HEALTH AND HUMAN DISEASE (3)
PR: SYG 2000 or Cl. An examination of the major theoretical and methodological tools used by sociologists in studying medical care. A representative sampling of medical sociological studies will be reviewed and discussed.

SYO 4500 SOCIAL PSYCHOLOGY - SS (3)
PR: PSY 2012 or SYG 2000 or Cl. Behavior of the individual being as affected by social and cultural influences of modern society.

SYP 4300 COLLECTIVE BEHAVIOR (3)
PR: SYG 2000 or Cl. Study of the development of group and mass behavior throughout social movements.

SYP 4420 CONSUMER CULTURE (3)
PR: SYG 2000 or Cl. Socio-cultural elements which define and accompany the process of industrialization as observed in mature industrial nations.

SYP 4510 SOCIOLOGICAL ASPECTS OF DEVIANCE (3)
PR: SYG 2000 or Cl. Definition and theories of deviance applied to substantive areas such as drug use, sexual varieties, and other stigmatized activities, mental illness, and white collar crimes.

SYP 4530 JUVENILE DELINQUENCY (3)
PR: SYG 2000 or Cl. Theories of delinquency, patterns of delinquent behavior methods of control and treatment.

SYP 4540 LEISURE IN SOCIETY (3)
PR: SYG 2000 or Cl. Facts and trends of changing leisure-time patterns in the USA and other countries; various conceptualizations of leisure; relationships on non-work time to work attitudes, personality, family, community, subcultures, religion, value systems, social class, and the functions of government.

SYP 4650 SPORT IN SOCIETY (3)
PR: SYG 2000 or Cl. An examination of the broad issues concerning sport in both a historical and contemporary perspective. Sport will be viewed in relation to social institutions, economic considerations, mass media, and the sport group as a micro-social system.

WOMEN'S STUDIES

AFA 4335 BLACK WOMEN IN AMERICA - 6A-XMW (3)
An interdisciplinary survey of the contemporary experience of black women in America, including the African roots, myths, and realities surrounding that experience. (May also be taken for credit in Africana Studies.)

AMH 3561 AMERICAN WOMEN I (4)
A study of women in the evolution of American society from European origins to 1877. Women's roles in the family,
economy, politics, wars, religion and reform movements will be examined. (May also be taken for credit in History.)

AMH 3562 AMERICAN WOMEN II (4)
A study of women in the evolution of American society from 1700 to the present. Special emphasis on women’s roles in the family, economy, politics, wars, religion and reform movements will be examined. (May also be taken for credit in History.)

AMS 3370 SOUTHERN WOMEN: MYTH AND REALITY -6A (3)
An analysis of the myths surrounding Southern Women, this course will identify these myths, discern their sources and purposes, and contrast them with history. (May also be taken for credit in American Studies.)

ANT 4302 SEX ROLES IN CROSSCULTURAL PERSPECTIVE (3)
PR: ANT 3410 or CI. Focuses on various theories, models and beliefs about male-female behaviors and interactions in human cultures throughout history and in various societies in the world today. (May also be taken for credit in Anthropology.)

COM 4030 WOMEN AND COMMUNICATION (3)
Examines women’s patterns of communication in a variety of contexts. Cross-listed with Communication.

PHI 4632 FEMINIST ETHICS -XMW (3)
A study of the varied approaches to moral reasoning taken by feminist ethical writers such as Wolfstcokne, Mill, Gilligan, Daly, Hoagland and others. (May also be taken for credit in Philosophy.)

PHM 5125 TOPICS IN FEMINIST PHILOSOPHY (3)
A study of recent feminist philosophical approaches to epistemology, aesthetics or political philosophy. (May also be taken for credit in Philosophy.)

POS 4693 WOMEN AND LAW I (3)
Introduction to issues concerning the legal aspects of sex and sex-based discrimination as embodied in statutory and case law, focusing on constitutional and family law and reproductive freedom issues. Open to majors and non-majors. (May also be taken for credit in Government and International Affairs.)

POS 4694 WOMEN AND LAW II (3)
PR: POS 4693 or CI. Legal position of women in American society and remedies available to challenge current laws and practices, with specific emphasis on employment and education issues as they relate to both women and men. (May also be taken for credit in Government and International Affairs.)

PUP 4323 WOMEN AND POLITICS -6A -XMW (3)
An analysis of the impact of gender on power and influence in American society, and women’s changing role in the political process. Open to majors and non-majors. (May also be taken for credit in Government and International Affairs.)

REL 3145 WOMEN AND RELIGION -6A (3)
Status and roles of women as compared to men in the Judeo-Christian tradition. Contemporary issues of feminist theology, and the controversies surrounding them. (May also be taken for credit in Religious Studies.)

SOP 3742 PSYCHOLOGY OF WOMEN -SS (3)
Theories of female personality. Current research on socialization, sexuality, reproduction. Emerging lifestyles and developmental tasks of the life cycle. (May also be taken for credit in Psychology.)

SPT 2524 WOMEN WRITERS OF LATIN AMERICA (3)
Literature of Latin-American women (in translation). Topics related to race and ethnicity, values and ethics, social, economic, and political issues. Readings will include oral histories, interviews, diaries and memoirs, poetry, short stories, and novels. (May also be taken in Modern Languages and Linguistics.)

SYD 4800 GENDER AND SOCIETY (3)
PR: SYG 2000, WST 3010 or 3011; or CI. Historical and contemporary exploration of current issues relevant to sex roles in America. Emphasis on sex role differences, interpersonal relationships and institutional participation. (May also be taken for credit in Sociology.)

WST 2309 THE FEMALE EXPERIENCE IN AMERICA (3)
The female experience in America, in historical context, with an emphasis on women in families of various classes, races, and ethnic groups from colonial times to 1870.

WST 2380 HUMAN SEXUAL BEHAVIOR -SS (3)
The dynamics of human sexuality: biological, constitutional, cultural and psychological aspects. The range of sexual behavior across groups. Sources of beliefs and attitudes about sex, including sex roles and especially female sexuality.

WST 3010 INTRODUCTION TO WOMEN'S STUDIES -SS -NW (3)
Survey of major issues relevant to the female experience. The women's movement: historical, psychological, sociological, anthropological perspectives.

WST 3011 ISSUES IN FEMINISM -SS (3)
Survey of major issues relevant to the female experience: marriage and the family, sexuality, work, creativity.

WST 3210 WOMEN IN WESTERN CIVILIZATION I -6A -HP (3)
Survey of women in the ancient Near East, ancient Rome, early Middle Ages. Origins of Western attitudes toward sex roles, female sexuality, relation of power to gender. (May also be taken for credit in History.)

WST 3220 WOMEN IN WESTERN CIVILIZATION II -HP (3)
Survey of European women from the late Middle Ages to the twentieth century: differing consequences of historical changes for women and men. (May also be taken for credit in History.)

WST 3270 AMERICAN WOMAN IN CONTEMPORARY SOCIETY I (3)
An analysis of the status and opportunities of contemporary American women in their social context, using both historical and socio-psychological data. (Only offered on the Ft. Myers campus.)

WST 3271 AMERICAN WOMAN IN CONTEMPORARY SOCIETY II (3)
An analysis of current issues facing American women, focusing on the nature and consequences of stereotyping, and on women and employment, creativity, health issues, the family, aging, poverty and abuse. (Only offered on the Ft. Myers campus)

WST 3275 WOMEN IN THE DEVELOPING WORLD (3)
Survey of status of women in Asia, Africa, Latin and Caribbean America, compared to that in USA, Canada, West Europe, Marxist-Leninist countries. (May also be taken for credit in Government and International Affairs.)

WST 3360 MEN AND SEXISM (3)
Ways in which sex role conditioning affects the lives of men.

WST 4260 RESEARCH ISSUES ON WOMEN OF COLOR -6A -XMW (3)
An interdisciplinary introduction to the research process as it has been carried out on women of color nationally and internationally.

WST 4262 LITERATURE BY AMERICAN WOMEN OF COLOR -6A -XLW (3)
An introduction to contemporary women writers of color in the U.S.: Native Americans, African Americans, Asian Americans, and Chicanas/U.S. Latinas. Readings will include literary and contextual articles on historical and cultural issues. (May also be taken for credit in English Department.)

WST 4263 THIRD WORLD WOMEN WRITERS -XLW (3)
Introduces the literature of women from various anglophone countries in Africa, the Caribbean, and South Asia; some U.S. writers will be included to represent a third world diasporic consciousness. (May also be taken for credit in English Department.)

WST 4310 FEMINISM IN AMERICA -6A -XMW (3)
A study of feminist critiques of American women's experiences and status, and their implications for women's lives, by 19th- and 20th-century theorists, and how adequately these various critiques address the intersections of gender, class, ethnicity, and race.

WST 4320 WOMAN'S BODY/WOMAN'S MIND (3)
An analysis of the historical, social and political perspectives of women's health and healing experiences, and how woman's role as patient and provider of care are shaped by public and cultural assumptions.
WST 4335 WOMEN AND FILM (4)

WST 4342 CLASSICS IN FEMINIST THEORY (3)
A study of classic contributions to the elaboration of feminist thought from the 18th century to the present in an attempt to discover the roots of the contemporary feminist movement. This course is cross-listed with Philosophy.

WST 4350 WOMEN AND SCIENCE (3)
An examination of selected issues related to women and the natural and physical sciences including: historical participation of women in science, current status of women in science, and feminist critiques of science as a discipline.

WST 4900 DIRECTED READINGS (1-3)
PR: Registration requires instructor's written consent and signed contracts from instructor of choice. To provide advanced students with interdisciplinary research experience in areas of specific interest. May be repeated up to 6 credit hours.

WST 4910 DIRECTED RESEARCH (1-3)
PR: Registration requires instructor's written consent and signed contracts from instructor of choice. To provide advanced students with interdisciplinary research experience in areas of specific interest. May be repeated up to 6 credit hours.

WST 4930 SELECTED TOPICS (1-4)
PR: WST 3010 or Cl. Study in special areas such as Women and Work, Reproductive Law, Women and Health.

WST 4935 SEMINAR IN WOMEN'S STUDIES (3)
PR: Women's Studies Major. Recognizing the interplay between personal connections and intellectual experience, this capstone course is designed to focus on topical areas related to women's studies and facilitate linking student learning experience to future plans.

WST 5001 FEMINIST RESEARCH AND METHODOLOGY (3)
The main goals of this course are to develop a more comprehensive understanding of the situation of women in society and to develop a theoretical basis for integrating this knowledge into the student's graduate course of study.

WST 5266 WOMEN OF COLOR: ACTIVISM AND SOCIAL CHANGE (3)
Intensive reading and discussion of the participation of women of color in contemporary revolutionary and reformist activities. Class project involvement is required.

WST 5318 FEMINIST SPIRITUALITY (3)
This course will focus on the many voices of contemporary feminist spirituality, emerging from women's experiences in diverse religious, ethnic and cultural traditions, and representing a range of theoretical perspectives from biblical feminism to goddess worship and wicca. (May also be taken for credit in Religious Studies.)

WST 5934 SELECTED TOPICS (1-4)
Study of current research methods and scholarship on women from a multidisciplinary perspective. May be repeated as topics vary. (Cl).
ACCG 3074 MANAGERIAL ACCOUNTING FOR NON-BUSINESS MAJORS (3)
The study of the uses of accounting data internally by managers in planning and controlling the affairs of organizations. Does not count towards major or CPA requirements.

ACCG 3103 INTERMEDIATE FINANCIAL ACCOUNTING I (3)
PR: ACG 2021. Theory and methodology underlying financial reporting, including the FASB's conceptual framework, the accounting process, financial statements, accounting changes, present value applications, and current assets.

ACCG 3113 INTERMEDIATE FINANCIAL ACCOUNTING II (3)
PR: ACG 3103. Continuation of ACG 3103. Topics covered include property, plant and equipment, intangibles, current liabilities, long-term debt, stockholders' equity, earnings per share computations, and investments.

ACCG 3341 COST ACCOUNTING AND CONTROL I (3)
PR: ACG 2071 or ACG 3103. Deals with cost accounting systems for different entities, cost behavior patterns, cost-volume-profit analysis, relevant information for decision making, budgets and standard costs for planning and control.

ACCG 3401 ACCOUNTING INFORMATION SYSTEMS (3)
PR: ACG 2021 and CGS 2000. This course provides students with a basic understanding of well-controlled information systems in a variety of technological environments with added emphasis on the collection, processing, and reporting of accounting information. Students who complete this course will not receive credit for ACG 4621.

ACCG 4123 INTERMEDIATE FINANCIAL ACCOUNTING III (3)

ACCG 4351 COST ACCOUNTING AND CONTROL II (3)
PR: ACG 3341. Application of the material covered in ACG 3341 with specific emphasis on cost allocations, performance measurements, analysis of current cost accounting systems and accounting in today's environment (considering the influence of the international environment).

ACCG 4501 GOVERNMENTAL/NOT-FOR-PROFIT ACCOUNTING (3)
PR: ACG 2021. Application of financial and managerial accounting, and auditing, principles and theory to both governmental and not-for-profit entities.

ACCG 4621 COMPUTER CONTROL AND AUDIT (3)
PR: ISM 3113. Study of information systems controls and auditing techniques emphasizing the effect both general and specific controls have on asset protection, data integrity, system effectiveness and efficiency in computerized business environments. Students who complete this course will not receive credit for ISM 4320 or ACG 3401.

ACCG 4632 AUDITING I (3)
PR: ACG 3113 and ACG 3401. This course provides a sound conceptual foundation of basic Auditing process from the perspective of the public accounting profession. Professional standards, ethics, legal responsibilities, and the utilization of technology are addressed.

ACCG 4642 AUDITING II (3)
PR: ACG 4632. Further development of material covered in ACG 4632, with special emphasis on additional reporting topics and audit techniques not previously addressed.

ACCG 4901 INDEPENDENT STUDY (1-3)
PR: Consent of Director. Individual study contract with instructor and director required. The research project will be mutually determined by the student and instructor. May be repeated up to 6 credit hours. (SU only.)

ACCG 4911 INDEPENDENT RESEARCH (1-4)
PR: Consent of Director. Individual study contract with instructor and director required. The research project will be mutually determined by the student and instructor. May be repeated up to 8 hours.

ACCG 4931 SELECTED TOPICS IN ACCOUNTING (1-4)
PR: CI. The course content will depend on student demand and instructor's interest.

ACCOUNTING/LAW


FINANCE

Chairperson: R. Meyer; Lykes Professor of Banking & Finance: J. L. Pappas; University Distinguished Service Professor and Surgeon Bonanni Distinguished Professor of International Finance: A. Beenbakker; Professor Emeritus-Dean Emeritus: R. G. Cox; Professors: A. Beenbakker, S. E. Bolten, S. Koplin, R. L. Meyer, J. L. Pappas, F. B. Power, A. Schwartz, K. F. Wleand; Associate Professors: S. Besley, S. B. Bumla, D. A. Johnson, P. Kares, R. J. Rvivard; Assistant Professors: D. J. Borgia, J. Qi, R. Sanders, R. Weigand; Other Faculty: J. Rader.

INFORMATION SYSTEMS AND DECISION SCIENCES


MANAGEMENT


MARKETING

ECO 4932 HONORS ACCOUNTING SEMINAR (3)
PR: Honors accounting student in final semester of bachelor's program. Use of case studies to explore the interaction of accounting topics that have been previously emphasized in separate courses.

ECO 5201 ADVANCED FINANCIAL ACCOUNTING IV (3)

ECO 5675 INTERNAL AND OPERATIONAL AUDITING (3)
PR: ACG 3113 and ACG 3401; CR: ACG 4632. To provide students with an opportunity to learn about the theory and practice of Internal and Operational Auditing and to apply relevant audit principles and techniques to selected audit problems.

ECO 5935 SELECTED TOPICS IN ACCOUNTING (1-4)
PR: CI. To allow advanced undergraduate students and graduate students to research and study contemporary and emerging topics in the field. May be repeated up to 6 credit hours.

TAX 4001 CONCEPTS OF FEDERAL INCOME TAXATION (3)
PR: ACG 2021. Major concepts used in taxation of income by federal government including enactment of tax laws, basic tax research, preparation of basic tax returns and exploration of tax policy issues.

TAX 5015 FEDERAL TAXATION OF BUSINESS ENTITIES (3)
PR: Tax issues encountered by small businesses. Includes tax planning, capital formation and preservation, tax compliance and tax alternatives.

ECONOMICS

ECO 1000 BASIC ECONOMICS-SS (3)
Survey of Economics principles and issues. Scarcity, choice, markets, prices, the monetary system, unemployment, inflation, international trade and finance. (No credit after completing ECO 2013/2013. No credit toward the major or minor in Economics.

ECO 2013 ECONOMIC PRINCIPLES (MACROECONOMICS)-SS (3)

ECO 2023 ECONOMIC PRINCIPLES (MICROECONOMICS)-SS (3)
Introduction to the theory of price determination. How an economy decides what to produce, how to produce and how to distribute goods and services.

ECO 2935 SELECTED TOPICS IN ECONOMICS (1-3)
PR: CI. Topics selected by department. May be repeated if topics vary. Not available for credit to upper-level students admitted to the College of Business.

ECO 3101 INTERMEDIATE PRICE THEORY (3)
PR: ECO 2023. The price system and allocation of scarce resources between competing uses.

ECO 3203 INTERMEDIATE INCOME & MONETARY ANALYSIS (3)
PR: ECO 2013 and ECO 3101 with a grade of "C" or better. Determination of income, employment, prices, and interest rates. Aggregate demand and aggregate supply.

ECO 3622 AMERICAN ECONOMIC HISTORY (3)
PR: ECO 2023. Growth and evolution of American economic institutions from Colonial times to the present.

ECO 3703 INTERNATIONAL ECONOMICS (3)
PR: ECO 3101 with a grade of "C" or better. Role of international trade and finance in the U.S. economy. Currencies, exchange rates, payments, exchange rate determination, balance of payments and international commercial policy.

ECO 4105 ADVANCED PRICE THEORY (PR: Grade of B or better in ECO 3101. An advanced survey of special topics in microeconomics: borrowing and saving, decision making under certainty, markets for capital and labor, game theory, production and exchange efficiency, social welfare, and efficiency consequences of market and non-market allocation.

ECO 4201 ADVANCED MACROECONOMIC THEORY (3)
PR: Grade of "B" or better in ECO 3203. An advanced survey of special topics in macroeconomics. Develops and contrasts the classical theories of economic growth, real business cycle and new Keynesian models. Relevant empirical studies are presented.

ECO 4303 HISTORY OF ECONOMIC THOUGHT (3)
PR: ECO 3101 with a grade of "C" or better. Development of economic thought from Plato to Marshall.

ECO 4321 MARXIST POLITICAL ECONOMY (3)
PR: ECO 2013 or CI. The Marxist school of thought in economics. Application of Marxist theory to problems of advanced capitalist and socialist societies.

ECO 4401 INTRODUCTION TO MATHEMATICAL ECONOMICS (3)
PR: ECO 2013, QMB 2300, and MAC 2323 or CI. Mathematical models of optimizing behavior and economic equilibrium.

ECO 4421 INTRODUCTION TO ECONOMETRICS (3)
PR: QMB 3200 with grade of "B" or better or CI. Survey of basic econometric techniques. Regression analysis employed to estimate consumption, investment, demand, cost, and production functions. Examines problems of autocorrelation, heteroscedasticity, multicollinearity, and specification errors.

ECO 4504 PUBLIC FINANCE (3)

ECO 4713 INTERNATIONAL MONETARY RELATIONS (3)
PR: ECO 3203 Advanced analysis of international macroeconomic relationships. Foreign exchange market, international monetary system balance of payments.

ECO 4723 INTERNATIONAL COMMERCIAL POLICIES (3)
PR: ECO 3101 with a grade of "C" or better. Advanced analysis of international trade policy and commercial policy, international economic integration, multinational enterprise.

ECO 4905 INDEPENDENT STUDY (1-3)
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated up to 6 credit hours. (SuU only.)

ECO 4914 INDEPENDENT RESEARCH (1-3)
PR: CI. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 6 hours.

ECO 4935 SELECTED TOPICS IN ECONOMICS (1-3)
PR: CI. Topics to be selected by the instructor or instructors on pertinent economic issues.

ECO 3203 LABOR ECONOMICS (3)
PR: ECO 3101 with a grade of "C" or better. Determinants of wage and employment levels; occupation, industrial and geographical wage differentials, union and public policy effects on labor markets; the economics of discrimination; inflation and unemployment.

ECO 3302 ENVIRONMENTAL ECONOMICS (3)
PR: ECO 2023. An economic analysis of environmental issues. The economics of resource use and pollution control are examined using the concepts of externalities, cost-benefit analysis, public goods, and property rights.

ECO 3413 ECONOMICS OF REGULATION AND ANTITRUST (3)
PR: ECO 2023. Economic analysis of the rationale and performance of government regulation and antitrust policy. Examination of antitrust issues or price fixing, mergers, and monopolization, and issues of regulating electric utilities, airlines, trucking, consumer product safety, product quality, and the environment.

ECO 3530 ECONOMICS OF HEALTH (3)
PR: ECO 3101 with a grade of "C" or better. Application of economic methods to health care topics. Demand for medical care, public and private health insurance; physician and hospital supply of medical care; government regulations and national healthcare systems.
FIN 4441 ADVANCED CORPORATION FINANCE
PR: FIN 4504. An examination of the financial policies of corporations, with special reference to dividend policy, financial structure, capital expenditures, acquisitions, mergers, and reorganization.

FIN 4443 FINANCIAL POLICIES AND STRATEGIES
PR: FIN 4414. A senior seminar for majors in Finance. Primarily a case course examining financial policies and the application of financial analysis to alternative strategies.

FIN 4504 PRINCIPLES OF INVESTMENTS
PR: ECO 2013 and FIN 3403. Survey of the risks and returns of investment media in relation to the investment objectives of individual and institutional investors. Includes an examination of the capital markets, information flows, and analytical techniques in terms of their impact upon the valuation process.

FIN 4514 ADVANCED INVESTMENT ANALYSIS AND MANAGEMENT
PR: FIN 4504. A comprehensive survey of security analysis and portfolio management. The course will utilize a quantitative approach to investment selection and management.

FIN 4905 INDEPENDENT STUDY
PR: Cl. Specialized independent study determined by the student’s needs and interests. May be repeated up to six credit hours. (S/U only.)

FIN 4915 INDEPENDENT RESEARCH
PR: Cl. Individual study contract with instructor and department chairperson. The research project will be mutually determined by the student and instructor. May be repeated up to six hours.

FIN 4934 SELECTED TOPICS IN FINANCE
PR: Cl. Topics to be selected by instructor and department chairperson on pertinent Finance issues.

REE 3043 REAL ESTATE DECISION MAKING
PR: FIN 3403. Acquaints students with the range of knowledge required to engage in real estate decision making in the United States. Integrates the institutional framework with which decisions are made, the elements of financial analysis, deal structuring, and marketing, and the pricing, financing and allocation of real property in the real estate markets.

REE 3703 REAL ESTATE LOCATION THEORY AND URBAN DEVELOPMENT
PR: ECO 2023. The spatial determinants of real property demand and supply. Theoretical bases for market feasibility, risk analysis, real estate market forecasting.

REE 4103 REAL ESTATE APPRAISAL
PR: REE 3043. Comprehensive coverage of the basic concepts and principles of real estate appraisal. Emphasis placed on the use of valuation tools for the appraisal of real estate with emphasis on residential property.

REE 4143 INCOME PROPERTY VALUATION
PR: REE 3043 and FIN 3403. Application of general appraisal methodologies and financial analysis to the valuation of income producing properties. Focus is on the income approach to valuation.

REE 4204 REAL ESTATE FINANCE
PR: REE 3043. A comprehensive analysis of the institutional and legal framework of real estate financing together with an introduction to the financing techniques which are traditionally utilized to finance real estate. Includes methods of raising debt and equity funds. Analysis of real property for financing purposes is stressed in a decision-making context and how that decision affects the real estate investment.

REE 4303 REAL ESTATE INVESTMENT ANALYSIS
PR: FIN 4504. A comprehensive study of the determinants of the market and financial feasibility of the real estate investment decision. The development of market and site analyses, theoretical urban development patterns, and the role of taxation will be studied along with the application of analytical techniques for decision making.
RMI 4313 REAL ESTATE FEASIBILITY ANALYSIS (3)
PR: RMI 4303, RMI 4143, and QMB 3200. A comprehensive and in-depth study of the determinants of the market and financial feasibility of the real estate investment decision.

RMI 3011 PRINCIPLES OF INSURANCE (3)
Analysis of insurable risks of both business and individuals. An examination of the characteristics of those areas of risk and uncertainty where the mechanisms of insurance are alternative in alternatives. The concept, contracts, and institutions involved in insurance are examined in relationship to the socio-economic environment.

RMI 4115 LIFE, HEALTH, AND DISABILITY INSURANCE (3)
PR: QMB 3220, RMI 3011. The course will analyze the use of life, health, and disability insurance as a method of dealing with the risks of death, sickness, and disability. It will include an analysis of cost determination of the various types of coverage.

RMI 4210 PROPERTY INSURANCE (3)
PR: RMI 3011. Course dealing with recognition of personal and business property risks, and coverages which may be used in dealing with these risks. Considers the underwriting, marketing, and social problems associated with these coverages. Topics include commercial and residential fire insurance, inland marine and transportation coverages, and multiperil contracts. Not limited to Finance majors.

RMI 4220 CASUALTY INSURANCE (3)
PR: RMI 3011. Course dealing with recognition of personal and business casualty risks and coverages which may be used in dealing with these risks. Considers the underwriting, marketing, and social problems associated with these coverages. Topics include workmen’s compensation, public liability, automobile liability, suretyship and crime insurance. Not limited to Finance majors.

GENERAL BUSINESS ADMINISTRATION

BUL 3320 LAW AND BUSINESS I (3)
This course covers the nature of legal and societal institutions and environments, and major aspects of public, private, UCC and related business law.

BUL 3321 LAW AND BUSINESS II (3)
PR: BUL 3320. Legal problems in marketing of goods, nature of property, sales of personal property, securing of credit granted, nature and use of negotiable instruments.

BUL 3380 THE LAW OF BUSINESS ASSOCIATIONS (3)
PR: BUL 3320. Study of the law of corporations, the law of partnerships, and the law of agency.

BUL 4331 LAW AND THE ACCOUNTANT (3)
PR: BUL 3320 or Cl. A comprehensive study of commercial law as it affects the practice of accounting.

GEB 2350 DOING BUSINESS AROUND THE WORLD-SS (3)
This course introduces the student to: 1) the nature of international business; 2) the framework of international organizations and the monetary system within which international business functions; 3) forces affecting international business; and 4) management responses to problems caused by international environments.

GEB 2935 SELECTED TOPICS IN BUSINESS (1-6)
PR: Cl. Topics to be selected by department chairs. May be repeated if topics vary. Not available for credit to upper-level students who have been admitted to the College of Business.

GEB 4890 BUSINESS POLICY-XYW (3)
PR: Senior standing and FIN 3403, MAN 3025, MAR 3023. The course is intended to provide a unifying, integrating, and coordinating opportunity to tie together concepts, principles, and skills learned separately in other, more specialized courses in Business Administration.

GEB 4905 INDEPENDENT STUDY (1-3)
PR: Cl. Specialized independent study determined by the student’s needs and interests. May be repeated up to eight credit hours. (S/U only.)

GEB 4915 INDEPENDENT RESEARCH (1-4)
PR: Cl. Individual study contract with instructor and department chair(s) required. The research project will be mutually determined by the student and instructor. May be repeated up to 8 hours.

GEB 4935 SELECTED TOPICS IN BUSINESS (1-4)
The content and organization of this course will vary according to the current interests of the faculty and needs of students.

INFORMATION SYSTEMS AND DECISION SCIENCES

CGS 2000 COMPUTERS IN BUSINESS (3)
A study of the use and impact of computers in all areas of business organizations. Course includes hands-on experience and use of software packages for business analysis.

ISM 3011 MANAGEMENT INFORMATION SYSTEMS (3)
PR: CGS 2000, ACG 2021, ACG 2071 or equivalent. The study of information management, management information requirements and information systems in modern organizations. (May not be counted toward major requirements in MIS.)

ISM 3113 SYSTEMS ANALYSIS AND DESIGN (3)
PR/CR: ISM 3230. Study of the techniques and procedures used in assessing information requirements, analyzing information flows and processing activities, and designing computer-based business systems.

ISM 3230 INTRODUCTION TO BUSINESS APPLICATION DEVELOPMENT (3)
PR: CGS 2000 or equivalent, or Cl. Introduction to problem-solving and business application development. Review of programming and programming languages. Basic programming concepts are presented in a modern programming language. Principles of programming style are emphasized. Projects cover business applications.

ISM 3232 ADVANCED BUSINESS APPLICATION DEVELOPMENT (3)
PR: ISM 3230. Advanced presentation of business application development using a modern programming language. Advanced topics include data structures, indexing, file processing, and user interfaces. Good program design techniques are emphasized. Advanced business applications are developed. (May not be counted toward major requirements in MIS.)

ISM 3441 MANAGEMENT SCIENCE/PRODUCTION OPERATIONS MANAGEMENT APPLICATIONS (3)
PR: ISM 3113. Principles of database design/management for mainframe, micro, and client/server environments; including data modeling, physical vs. logical representation and back-up and recovery management.

ISM 4220 BUSINESS DATA AND COMMUNICATIONS (3)
Fundamentals of data communication, including network architectures, communication protocols, transmission standards and media access control methods.

ISM 4236 OBJECT-ORIENTED DESIGN AND DEVELOPMENT (3)
PR: ISM 3232. This course presents an object-oriented approach to software development of business information systems. Students will learn to create object models of the business world and to develop information system designs based on these objects. The designs will be implemented by use of the C++, VisualBasic, or other OO programming languages.

ISM 4240 DISTRIBUTED OPERATING SYSTEMS (3)
PR: ISM 3230. Introduction to distributed operating systems fundamentals such as distributed systems architecture, file structures, client-server, open systems, resource allocation, and basic tools for manipulating these operating environments.

ISM 4990 SENIOR SEMINAR IN INFORMATION SYSTEMS (3)
PR: ISM 3113, ISM 4300. A seminar covering advanced topics in systems management, analysis and design. Applications of these procedures to actual or hypothetical cases.

ISM 4300 MANAGING INFORMATION SERVICES (3)
PR: MAN 3025 and ISM 3113 or equivalent. Current issues in information systems management focusing on organizational policies, procedures and standards for managing distributed computing resources.
MAN 4504 OPERATIONS MANAGEMENT: A SYSTEMS APPROACH
PR: ISM 3431 or equivalent. Studies the problems of "operations" in all types of enterprises in both the public and private sectors. Emphasis is placed on the application of various decision science methodologies to problem situations.

ISM 4407 INDEPENDENT STUDY
Independent study as directed by designated faculty. May be repeated up to 6 credit hours. (S/U only)

ISM 4930 SELECTED TOPICS IN MIS
Selected topics in MIS. (1-3)
MAR 3400 PROFESSIONAL SELLING (3)  
PR: MAR 3023 or Cl. A study of the stages of the professional selling process, and the role of sales in today's marketing environment. Emphasis on learning adaptive selling techniques and developing effective interpersonal communications skills. Sales careers are examined.

MAR 3613 MARKETING RESEARCH (3)  
PR: QMB 3200, MAR 3023. A study of research methods and techniques applicable to problem solving in marketing. Attention is also given to defining information needs, determining the value of information, interpreting and reporting information for use in marketing decision making.

MAR 3823 MARKETING MANAGEMENT (3)  
PR: MAR 3023. An applications oriented study of the marketing function at an intermediate level. Emphasis upon techniques for analysis and problem-solving. Builds upon the principles and concepts learned in MAR 3023, and provides a strong foundation for the remaining courses in the marketing curriculum.

MAR 4156 INTERNATIONAL MARKETING (3)  
PR: MAR 3023. A study of procedures and problems associated with establishing marketing operations in foreign countries. Includes the institutions, principles and methods involved in the solution of these business problems as well as the effects of national differences on business practices and buyer behavior.

MAR 4203 CHANNELS MANAGEMENT (3)  
PR: MAR 3023. A detailed study of marketing channels as a functional area of marketing management responsibility and as a part of marketing strategy. Attention is given to wholesaling and retailing and their structural, dynamic interrelationships including distribution logistics.

MAR 4213 LOGISTICS AND PHYSICAL DISTRIBUTION MANAGEMENT (3)  
PR: MAR 3023 or Cl. A study of logistics in the marketing of goods and services. Includes a description and analysis of the logistics environment as well as components of the physical distribution system with emphasis on information flows and the application of quantitative techniques used in establishing and controlling customer service levels.

MAR 4231 RETAILING MANAGEMENT (3)  
PR: MAR 3023. A comprehensive study of the retailing structure, institutions, and environment. Includes pertinent management theories and practices in analyzing, organizing, planning and controlling retail operations, both large and small.

MAR 4333 PROMOTION MANAGEMENT (3)  
PR: MAR 3023 or Cl. A study of the role of promotion in the marketing program of the firm, including the promotional tools available to the marketing manager and the various types of decisions made in the promotional area. Decision making process in development of a promotional program is emphasized.

MAR 4403 SALES MANAGEMENT (3)  
PR: MAR 3023 or Cl. A study of sales management and strategy as a subset of marketing management. Emphasis is placed on developing the problem-solving and decision-making skills required of the sales manager in the modern market-oriented company.

MAR 4453 BUSINESS TO BUSINESS MARKETING (3)  
PR: MAR 3023. A study of the marketing of goods and services to the industrial and institutional sectors. Includes characteristics of the markets and channels of distribution, sales, management, research and promotional practices, marketing policies and strategies.

MAR 4503 BUYER BEHAVIOR (3)  
PR: MAR 3023. A study of the basic concepts of buyer behavior, including pre- and post-purchase attitudes and behavior patterns, information processing relating to the functional areas of marketing and the buyer's decision-making process. Managerial applications to marketing are emphasized.

MAR 4824 MARKETING MANAGEMENT PROBLEMS (3)  
PR: Senior Standing, MAR 3823, MAR 3613, and two other 4000 level marketing courses, or Cl. The integration of marketing knowledge applied to decision roles in managing the total marketing effort of firms, and coordination with other major functional areas on specific problems.

MAR 4903 INDEPENDENT RESEARCH (1-3)  
PR: Cl. Individual study contract with instructor and department chairperson required. The research project will be mutually determined by the student and instructor. May be repeated up to 6 credit hours.

MAR 4905 INDEPENDENT STUDY (1-3)  
PR: Cl. Specialized independent study determined by the students' needs and interests. May be repeated up to 6 credit hours. (S/U only.)

MAR 4933 SELECTED TOPICS IN MARKETING (1-3)  
PR: Cl. Topics to be selected by instructor and department chairperson.
ADULT AND VOCATIONAL EDUCATION


CHILDHOOD/LANGUAGE ARTS/READING EDUCATION


EDUCATIONAL LEADERSHIP


EDUCATIONAL MEASUREMENT AND RESEARCH

Chairperson: B. W. Hall; Professors: L. M. Carey, B. W. Hall, C. V. Hines, W. G. Katzenmeyer, D. E. Stone, R. E. Wilk; Associate Professor: S. Hutchcraft; J. D. Kromrey, Assistant Professors: R. F. Dedrick, S. Lang, S. Maller.

PHYSICAL EDUCATION


PSYCHOLOGICAL AND SOCIAL FOUNDATIONS


SECONDARY EDUCATION


SPECIAL EDUCATION


ADULT EDUCATION

ADE 4384 WORKING WITH THE ADULT LEARNER: ADULT EDUCATION

An investigation of the needs of the adult learner. Identification of principles of adult learning; physiological, psychological and social characteristics of adult learners, and corresponding implications are explored.

ART EDUCATION

ARE 3044 EXPERIMENTAL BASIS OF ARTISTIC MIND

PR: Admission to College of Education. Designed to awaken the language of image and metaphor, with emphasis on the internal and expressive aspects of art as well as their application in the schools and the community.

ARE 3534 ART TEACHING STRATEGIES I

PR: Admission to College of Education and ARE 3044. A combination of theory, philosophy and practice in both public and private learning centers to provide the student with a variety of teaching concepts and media exploration in art education and to further enable the student to understand stages of young people, three to eighteen.

ARE 4112 EDUCATION THROUGH CRAFTS

An in-depth study of arts and craft media for children. Emphasis will be placed on innovative use of new materials and curriculum in school restructuring.

ARE 4440 ART TEACHING STRATEGIES II

PR: Admission to College of Education and ARE 3044. The study and practice of processes and media involved with the exploration and expression of cultural traditions and individual ideas through crafts.

ARE 4642 COMMUNITY ARTS

PR: Admission to College of Education and ARE 3044. Explores the arts as infrastructure through identification, exploration and experimentation with unique community spaces, populations and new environments for and learning in the arts.

ARE 4909 DIRECTED STUDY: ART EDUCATION

PR: Senior standing. Designed to extend competency in field of art education.

ARE 4936 SENIOR SEMINAR IN ART EDUCATION


ARE 4940 INTERNSHIP: ART EDUCATION

CR: ARE 4936. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours. (SU only.)

BUSINESS AND OFFICE EDUCATION

BTE 4401 SPECIAL TEACHING METHODS: BUSINESS EDUCATION

PR: Successful completion of BE competencies, or CI. Methods, techniques, and materials for skill development.

BTE 4410 METHODS OF TEACHING: BUSINESS EDUCATION

PR: Successful completion of BE competencies, or CI. Methods, techniques and materials for instruction.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTE 4909</td>
<td>DIRECTED STUDY: BUSINESS EDUCATION</td>
<td>(1-3) PR: Senior standing. To extend competency in teaching field.</td>
</tr>
<tr>
<td>BTE 4936</td>
<td>SENIOR SEMINAR IN BUSINESS AND OFFICE EDUCATION</td>
<td>(2) PR: Senior standing; CR: BTE 4940. Synthesis of teacher candidate's courses in complete college program.</td>
</tr>
<tr>
<td>BTE 4940</td>
<td>INTERNSHIP: BUSINESS EDUCATION</td>
<td>(1-12) CR: BTE 4936. One full semester of internship in a public or private school. In special programs where the intern experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours. (S/U only).</td>
</tr>
<tr>
<td>EOG 4620</td>
<td>CURRICULUM</td>
<td>DEC 2000 INTRODUCTION TO EARLY CHILDHOOD EDUCATION</td>
</tr>
<tr>
<td>BTE 5171</td>
<td>CURRICULUM CONSTRUCTION: BUSINESS EDUCATION</td>
<td>(3) Curriculum scope, the process of planning and organizing instructional programs with emphasis in task analysis and process evaluation.</td>
</tr>
<tr>
<td>BTE 4948</td>
<td>FIELD-BASED SEMINAR IN BUSINESS EDUCATION</td>
<td>(3) Supervised field experience and orientation to broad field business education. Specifically designed to be preparatory for the internship. (S/U only).</td>
</tr>
<tr>
<td>EME 4402</td>
<td>INTRODUCTION TO COMPUTERS IN EDUCATION</td>
<td>(2) Introduction to microcomputer technology and its function in the classroom to augment the teaching and learning processes. Topics include the critical evaluation of educational software; conceptualizing uses of computers in the classroom in terms of computer-directed instruction, computer-enhanced instruction, and computer-managed instruction; understanding hardware; using and applying commercial courseware, general applications software (word processors, database managers, etc.), programming, disk operating systems, and microcomputers hardware.</td>
</tr>
<tr>
<td>EME 5403</td>
<td>MICROCOMPUTERS IN EDUCATION</td>
<td>(3) A survey course designed to introduce practicing teachers to microcomputer technology and its function in the classroom to augment the teaching and learning process. Objectives include the use and evaluation of educational software, classroom use of computers, instructional computing research, generic applications software (word processors, database managers, etc.), and disk operating system.</td>
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<tr>
<td>EEC 4201</td>
<td>LITERATURE IN EARLY CHILDHOOD EDUCATION</td>
<td>(3) Emphasis is placed on developing knowledge of literature for younger children (0 - 8 years) and methodologies and strategies for utilizing literature to teach literacy in content areas of the curriculum.</td>
</tr>
<tr>
<td>EOC 4203</td>
<td>PROGRAMS FOR YOUNG CHILDREN</td>
<td>PR: Admission to College of Education. Develops students understanding of programs in early childhood, philosophical orientations that guide program development, and components of high quality programs.</td>
</tr>
<tr>
<td>EOC 4211</td>
<td>INTEGRATED CURRICULUM: SCIENCE AND MATHEMATICS</td>
<td>(3) PR: Admission to College of Education. Provides students with knowledge of beginning sequential science and mathematical concepts for the appropriate stages of cognitive development of young children. Emphasis will be placed on how science and mathematics are integrated throughout the curriculum and become valued functional tools.</td>
</tr>
<tr>
<td>EOC 4212</td>
<td>INTEGRATED CURRICULUM: SOCIAL SCIENCES/HUMANITIES &amp; ARTS</td>
<td>(3) PR: Admission to College of Education. Emphasis is placed on understanding concepts associated with the major content areas within the social sciences. Planning, implementing, and evaluating appropriate learning experiences for children age 3 through grade 3 will link understanding to practice.</td>
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<tr>
<td>ECE 4300</td>
<td>COGNITIVE EXPERIENCES FOR YOUNG CHILDREN</td>
<td>PR: Admission to College of Education. Emphasizes theoretical and practical aspects of cognitive development for children ages 3 through 6 with focus on planning integrated experiences and content in science, mathematics, and social sciences.</td>
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<tr>
<td>EOC 4303</td>
<td>CREATIVE AND AFFECTIVE EXPERIENCES FOR YOUNG CHILDREN</td>
<td>PR: Admission to College of Education. Develops students' understandings of young children's creative expression through art, music, movement, play and drama. Emphasizes how to plan, implement, and evaluate appropriate learning experiences as well as selection of appropriate instructional materials.</td>
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<tr>
<td>EOC 4401</td>
<td>CHILD, FAMILY &amp; TEACHER RELATIONS</td>
<td>PR: Admission to College of Education. Focuses on developing an understanding of traditional and non-traditional families, structural and life style variations and parenting in diverse cultures and at-risk families. Implications from these understandings will guide development of a parent involvement plan that includes effective ways to communicate with parents, conference with parents, and plan parent meetings and home visits.</td>
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<tr>
<td>EOC 4706</td>
<td>LANGUAGE AND EMERGING LITERACY</td>
<td>PR: Admission to College of Education. Provides knowledge of language development and emerging literacy for typical</td>
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and atypical development in children from birth to third grade, including ESOL children.

EDE 4901 INDEPENDENT STUDY: ELEMENTARY EARLY CHILDHOOD EDUCATION (1-4) PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EDE 4936 SENIOR SEMINAR IN ELEMENTARY EDUCATION (2) PR: Senior standing; CR: EDE 4940. Synthesis of teacher candidate's courses in complete college program.

EDE 4940 INTERNSHIP: EARLY CHILDHOOD EDUCATION (10) CR: EEC 4936. Teacher candidate is required to demonstrate professional competencies during one semester of full-day internship in a public or private elementary school. (S/U only.)

EDE 4941 FIELD EXPERIENCE I (3) PR: Admission to College of Education. Field placement with three and four year olds where teacher candidates have opportunities to apply knowledge and skills in authentic situations and be objective observers of young children's development. Weekly seminars are conducted in conjunction with the field experience which provide teacher candidates an opportunity for reflection on their understandings.

EDE 4942 FIELD EXPERIENCE II (3) PR: Admission to College of Education. Field placement in kindergarten or primary grade where teacher candidates have opportunities to apply knowledge and skills in authentic situations. Emphasis on developing deeper understanding of children's development and implications of development for program planning for both typical and atypical children.

EDE 4943 FIELD EXPERIENCE III (3) PR: Admission to College of Education. Field placement in kindergarten or primary grade where teacher candidates have opportunities to apply knowledge and skills in authentic situations. Focus on developing deeper understanding of growth and development and relationship to curriculum planning with an emphasis on self-evaluation of knowledge, skills, and dispositions essential for teaching.

ELEMENTARY EDUCATION ARE 4313 ART FOR THE CHILD AND YOU (3) PR: Admission to College of Education. Art and the intellectual, creative, emotional, and aesthetic growth of children.

EDE 4301 TEACHING METHODS IN THE ELEMENTARY SCHOOL (4) PR: EDE 4941 and EDG 4620. Techniques and strategies appropriate to instruction of children in educational settings.

EDE 4905 INDEPENDENT STUDY: ELEMENTARY EDUCATION (1-4) PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EDE 4909 DIRECTED STUDY: ELEMENTARY EDUCATION (1-4) PR: Senior standing. To extend competency in teaching field.

EDE 4938 SENIOR SEMINAR IN ELEMENTARY EDUCATION (2) PR: Senior standing; CR: EDE 4940. Synthesis of teacher candidate's courses in complete college program.

EDE 4940 INTERNSHIP: ELEMENTARY EDUCATION (10) PR: EDE 4941 and EDE 4942; CR: EDE 4936. Teacher candidate is required to demonstrate professional competencies during one semester of full day internship in a public or private elementary school. (S/U only.)

EDE 4941 CHILDHOOD EDUCATION INTERNSHIP LEVEL I (4) PR: Admission to the Elementary Education. CR: RED 4310, EDG 4620. Students spend six hours per week in a supervised in-school experience and attend weekly seminar. Concurrent enrollment in EDG 4620-Elementary section. (S/U only.)

EDE 4942 CHILDHOOD EDUCATION INTERNSHIP LEVEL II (6) PR: EDE 4941, RED 4310, EDG 4620, EDF 3122, LAE 4314, EDE 4301, MAE 4310, SCE 4310, LAE 4414, SSE 4313, EME 4402. Students spend 12 hours per week in a supervised internship experience in classroom settings and attend a weekly seminar. (S/U only.)

HLP 4722 HEALTH AND PHYSICAL EDUCATION FOR THE ELEMENTARY CHILD (3) PR: Admission to the College of Education. A study of the importance of movement competency and its contribution to the development of a positive self-concept in children; content and methodology for developing appropriate movement experiences for children; content and methodology for teaching elementary health science.

LAE 4314 LANGUAGE ARTS IN CHILDHOOD EDUCATION (3) PR: Admission to the College of Education. Implementing a coordinated and integrated language arts curriculum and guiding the developmental language experiences of children in elementary school. Explores the content, organization, and instruction of oral and written expression in childhood education.

LAE 4414 LITERATURE IN CHILDHOOD EDUCATION-6A-XLIW (3) The selection, evaluation and use of fiction, nonfiction and poetry for instructional, informational, and recreational purposes in Childhood Education.

MAE 4316 Teaching ELEMENTARY SCHOOL MATHEMATICS I (3) PR: Admission to College of Education and two college level mathematics courses. Methods for teaching number ideas, computation skills, and mathematical reasoning.

MAE 4326 Teaching ELEMENTARY SCHOOL MATHEMATICS II (2) PR: MAE 4310. Methods for teaching informal geometry, measurement, probability and statistics.

MAE 4510 DIAGNOSIS AND TREATMENT OF LEARNING DISABILITIES IN SCHOOL MATHEMATICS (3) PR: MAE 4310 or equivalent. Presentation and analysis of teaching methods and models appropriate for use with students experiencing learning disabilities in mathematics; supervised conduct of a case study.

MUE 4210 MUSIC FOR THE CHILD (3) PR: Admission to Elementary program. Music fundamentals; the development of music skills and knowledge of music materials and teaching strategies for presenting music to children in the elementary school.

RED 4310 EARLY LITERACY LEARNING (3) PR: Admission to College of Education. Prepares preservice teachers to understand the foundations of literacy and the learning principles and instructional strategies necessary to provide literacy instruction to emergent, novice, and transitional readers and writers.

SCE 4310 TEACHING ELEMENTARY SCHOOL SCIENCE (3) PR: Admission to College of Education and completion of General Distribution Requirements in the Natural Science area. Techniques and materials for teaching science in the elementary school.

SSE 4313 TEACHING ELEMENTARY SCHOOL SOCIAL STUDIES (3) PR: Admission to College of Education or CI. Methods of planning and teaching subjects related to the study of people and their relationships with other people and their environment.

ENGLISH EDUCATION LAE 4323 METHODS OF TEACHING ENGLISH: MIDDLE SCHOOL (3) Whole language methods of integrating reading, writing, speaking, listening, viewing, and critical thinking activities into a literature-based program for middle school students. Must be taken one or two semesters prior to internship. Recommended to be taken with LAE 4404.

LAE 4464 ADOLESCENT LITERATURE FOR MIDDLE AND SECONDARY STUDENTS -6A-XLIW (3) PR: English Education majors or CI. A study of the types of literature read by adolescents with an emphasis upon the
criteria for the choice of good books and knowledge of available books and teaching materials. Recommended to be taken with LAW 4464 two semesters prior to internship.

LAE 4530 METHODS OF TEACHING ENGLISH: PRACTICUM (3) PR: Senior standing or enrollment in Plan II Master's Program. Required concurrently with LAE 4325 or LAE 4642. Taken one semester (spring or fall) prior to internship.

LAE 4642 METHODS OF TEACHING ENGLISH:
HIGH SCHOOL
PR: LAE 4464. Whole language methods of integrating reading, writing, speaking, listening, viewing, and critical thinking and abilities into a literature-based program for high school students. Must be taken one semester prior to internship with LAE 4530.

LAE 4936 SENIOR SEMINAR IN ENGLISH EDUCATION (2) PR: Senior standing. Synthesis of teacher candidate's courses in complete college program. Required concurrently with internship.

LAE 4940 INTERNSHIP: ENGLISH EDUCATION (1-12) One full semester of internship in a public or private school. Intern takes Senior Seminar in English Education concurrently. In special programs where the intern experience is distributed over two or more semesters, student will be registered for credit which accumulates from 9 to 12 semester-hours. (S/U only.)

LAE 5932 SELECTED TOPICS IN THE TEACHING OF ENGLISH (3) PR: Certification in English and/or Mass Communications and approval of graduate advisor. Investigation of topics which are of special interest to the student and are related to the teaching of English in the secondary school. Topics will be selected by the student in accordance with his particular goals and will be approved by the student's graduate advisor.

FOREIGN LANGUAGE EDUCATION

FLE 4314 FOREIGN LANGUAGE TEACHING IN THE ELEMENTARY SCHOOL (3) PR: EDG 4620 or concurrent registration. Fluency in target language and in English. Methods of planning and teaching foreign languages in the elementary school. The emphasis is on teaching communicatively and on integrating culture in the K-6 classroom.

FLE 4333 FOREIGN LANGUAGE TEACHING IN THE SECONDARY SCHOOL (3) PR: FLE 4314. Fluency in the target language and in English (or CC). Methods of teaching foreign languages within a communicative framework. Includes examination and practice of current instructional techniques in listening, speaking, reading and writing skills, testing, error correction, and computer assisted language instruction. The emphasis is on teaching foreign languages and teaching for cultural understanding at the secondary level 7-12.

FLE 4370 PRACTICUM IN FOREIGN LANGUAGE TEACHING IN THE SECONDARY SCHOOL (3) PR: Senior standing or enrollment in Plan II Master's Program (or CC). Required concurrently with FLE 4314 or FLE 4333. Fluency in the target language and in English. Preinternship field experience in a K-12 environment. Will include observation and practice in a K-12 classroom as well as class meetings.

FLE 4936 SENIOR SEMINAR IN FOREIGN LANGUAGE EDUCATION (2) PR: Senior standing. Synthesis of teacher candidate's courses in complete college program. Required concurrently with internship.

FLE 4940 INTERNSHIP: FOREIGN LANGUAGE EDUCATION (1-12) One full semester of internship in a public or private school. Intern takes Senior Seminar in Education concurrently. (S/U only.)

EDUCATION - GENERAL

EDG 4909 DIRECTED STUDIES PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

INDUSTRIAL AND TECHNICAL EDUCATION

EIA 3192 TECHNOLOGY EDUCATION AND SOCIETY (4) Introduction to programs, facilities and opportunities in teaching technology education. Includes historical, current and futuristic implications of technology in society.

EIA 3360 SPECIAL TEACHING METHODS: TECHNOLOGY EDUCATION (3) Equips Technology Education instructors with professional competencies for classroom and laboratory settings. Includes the selection of appropriate methods, planning, and delivery of instruction, along with supervision of students in laboratory areas.

EIV 4210 PROGRAM MANAGEMENT:
INDUSTRIAL-TECHNICAL EDUCATION (4) PR: Cl. Planning, organizing, motivating and controlling the learning environment in Industrial-Technical Education Classroom and Laboratories. Program standards for OSHA, program review, record keeping, and budgeting will be examined.

EIV 4314 METHODS OF TEACHING: DIVERSIFIED COOPERATIVE TRAINING (3) Methods, techniques, and materials for instruction. This course specializes in Diversified Cooperative Training.

EIV 4360 SPECIAL TEACHING METHODS: INDUSTRIAL-TECHNICAL EDUCATION (4) PR: EIV 4365 or Cl. Instructional techniques in industrial-technical education. Vocational Industrial Clubs of America activities may be included.

EIV 4385 PROGRAM MANAGEMENT: DIVERSIFIED COOPERATIVE TRAINING (3) Organization, coordination, and budgeting of adult, cooperative, and special programs.

EVT 4065 HISTORY AND PRINCIPLES OF VOCATIONAL EDUCATION (4) An overview of current policies and principles in vocational education including their historical, sociological, and philosophical bases. Open to majors and non-majors.

EVT 4084C PROFESSIONAL DEVELOPMENT IN INDUSTRIAL TECHNICAL EDUCATION (1-3) Designed for the ITE teacher in forming plans of professional development. Competencies include the development of a personal education philosophy; attributes in creating harmonious school community relationships; and desirable staff and teacher associations.

EVT 4165 CURRICULUM CONSTRUCTION: INDUSTRIAL-TECHNICAL EDUCATION (4) PR: EVT 4360 or Cl. Design, development, implementation and evaluation of effective curricular materials in industrial, technical and health related occupations; includes individualized and self-paced materials. Open to majors and non-majors.

EVT 4283 ORGANIZATION AND ADMINISTRATION OF STUDENT VOCATIONAL ORGANIZATIONS (1-4) Includes the organization and administration of the local student vocational organization in industrial, health occupations, business and distributive education.

EVT 4312 TEACHING METHODS: HEALTH OCCUPATIONS (4) PR: EVT 4360 or Cl. Equips health occupations instructors with professional competencies for classroom, laboratory and clinical settings. Includes selection of appropriate methods, planning and delivery of effective demonstrations, use of media and supervision of students in clinical areas.

EVT 4365 BASIC TEACHING METHODS IN VOCATIONAL EDUCATION (4) Examines the role of the vocational instructor in the teaching learning process; looks at factors that promote and inhibit learning. Reviews a wide variety of instructional approaches, techniques and methods; includes selection of techniques for situations.

EVT 4367 ASSESSING STUDENT SKILL IN INDUSTRIAL TECHNICAL EDUCATION (4) Techniques for assessing student's mastery of skills in industrial/technical education. Focuses on specific competencies including designing and administering performance tests, monitoring student progress, and others. Open to majors and non-majors.
MAE 4936 SENIOR SEMINAR IN MATHEMATICS EDUCATION  
PR: Senior Standing; CR: MAE 4940. Synthesis of teacher candidate’s courses in complete college program.

MAE 4940 INTERNSHIP: MATHEMATICS EDUCATION  
PR: MAE 4936. One full semester of internship in a public or private school. In special programs where the internship experience is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 semester hours. (S/U only.)

MEASUREMENT AND RESEARCH  
EDF 4430 MEASUREMENT FOR TEACHERS  
PR: Upper level standing. Concepts and skills related to designing and developing classroom tests; evaluating tests, instruction, and student progress; and communicating student achievement. Including application of performance assessment techniques and computer applications for measuring and assessing pupil progress.

PHYSICAL EDUCATION-ELECTIVE  
HLP 3081 PERSONAL WELLNESS: A LIFETIME COMMITMENT  
PR: Any determination of the bases for adopting a positive health lifestyle with a major emphasis on diet, weight management, physical fitness, stress management, and substance-abuse management.

PFL 1121 GOLF I  
Introductory experience in the sport of golf. Fundamental skills, information, strategy, and participation. (S/U only.)

PFL 1341 TENNIS I  
Introductory experiences in the sport of tennis. Basic skills, playing strategies, lecture, demonstration, and participation. (S/U only.)

PFL 1346 BADMINTON  
Progressive experiences in badminton, fundamental skills, strategy, information and participation. (S/U only.)

PFL 2122 GOLF II  
Continuation of PFL 1121. Emphasis on course play and refinement of strokes. (S/U only.)

PFL 2321 VOLLEYBALL  
Review and refinement of fundamental skills, presentation and practice of the various offensive strategies. (S/U only.)

PFL 2342 TENNIS II  
Continuation of PFL 1341L. Refinement of basic skills, supplementary strokes, greater emphasis on tactics and playing strategies. (S/U only.)

PFL 2441 RACKETBALL  
Development and refinement of the skills and strategies of Racketball with opportunity for competition and tournament play. (S/U only.)

PFL 2621 BASKETBALL  
Review and refinement of fundamental skills, presentation and practice of the various offensive and defensive strategies. (S/U only.)

PEM 1201 GYMNASTICS  
Introductory experiences in the various gymnastics events. Opportunities to specialize in areas of personal interests. (S/U only.)

PEM 1461 FOIL FENCING  
Progressive experiences in the sport of Foil Fencing, fundamental skills, strategy, information, and participation. (S/U only.)

PEM 2116 STRENGTH AND AEROBIC DEVELOPMENT  
Strength development activities combined with aerobic training for individual improvement. (S/U only.)

PEM 2131 WEIGHT TRAINING  
Knowledge and techniques necessary for increasing muscle function. Assessment of status and development of a personal program. (S/U only.)

PEM 2141 JOGGING  
Introduction to the knowledge and techniques necessary for increasing cardiorespiratory efficiency. Assessment of status and development of a personal program. (S/U only.)
PET 2113 LIFEGUARD TRAINING (2)
PR: PEN 2172 or equivalent. Knowledge and skills necessary for the enjoyment of swimming. Correct utilization and care of equipment. ARC certification offered. (S/U only.)

PET 2112 SWIMMING II (2)
PR: PEN 1121 or equivalent. Continuation of PEN 1121. Special emphasis on development of endurance and efficient stroking. (S/U only.)

PET 2116 SKIN & SCUBA DIVING (2)
PR: PEN 2172 or equivalent. Development of the essential skills and knowledge necessary for enjoyment of the activity. Correct utilization and care of equipment; emphasis on personal safety. (S/U only.)

PET 2117 AQUATIC TOPICS (1-2)
Topics offered are selected to reflect student need and faculty interest. May be repeated up to 9 credit hours.

PROFESSIONAL PHYSICAL EDUCATION

HLP 4941 WELLNESS INTERNSHIP (16)
PR: CC. Completion of all curriculum requirements. Supervised performance in adult fitness and/or wellness programs. Full semester on-site. Open to Wellness Leadership Physical Education Majors only. (S/U only.)

HSC 2400 FIRST AID (2)
Meets the American Red Cross certification requirements. (S/U only.)

PEP 3940 PRACTICUM IN HEALTH PROMOTION/WELLNESS (4)
PR: CI. Completion of Semesters I and II and admission to the College of Education. Practical experience as a professional in a community or worksite health promotion or wellness program. (S/U only.)

PEP 3951 COMMUNICATION SKILLS FOR WELLNESS LEADERS-6A (3)
PR: Completion of Semester I and II in Wellness Leadership track or CI. Designed to develop knowledge and skills in communication and counseling that is specific to wellness and health promotion.

PEO 3101 AQUATIC TOPICS (2)
PR: Red Cross beginning swimmer's skills or equivalent. Includes analysis of swimming skills, teaching methodology, conducting class activities, and organizing and conducting aquatic programs.

PEO 3170 AQUATIC EXERCISE (2)
PR: CC. An instructor training course in aquatic exercise. Focuses on teaching aerobic, strength, flexibility, and weight control exercises performed in swimming pools. Open to non-majors.

PET 3010 PERSONAL/PROFESSIONAL DEVELOPMENT SEMINAR (3)
PR: CC. Identification of personal and professional knowledge, skills, and attitudes necessary for successful professional practice of physical educators and wellness leaders. Introduction to career opportunities and the historical, philosophical, and sociological foundations of the profession. Development of a personal-professional development plan. Field work required. Majors only.

PET 3031 MOTOR DEVELOPMENT AND ASSESSMENT (3)
PR: CC. Study of the assessment, evaluation and motor development performance of children and adolescents and application of principles of motor skills acquisition in physical education instruction. Open to non-majors.

PET 3086 SURVEY OF WELLNESS PROGRAM (3)
PR: CC. An analysis of various types of wellness programs in the public and private sector including community-based programs, commercial health and fitness enterprises, government-based programs, corporate-based programs, and hospital health and fitness centers.

PET 3310 KINESIOLOGY (3)
PR: CC. A study of the structure and function of the skeletal and muscular systems and of mechanical principles related to psycho-motor performance. Open to non-majors.

PET 3351 EXERCISE PHYSIOLOGY I (3)
PR: CC. A study of the effects of physical activity on the body. Topics include acute and chronic adaptation of the cardiovascular, muscular, metabolic, hormonal, and energy systems to exercise. Open to non-majors.

PET 3421 CURRICULUM AND INSTRUCTION IN PHYSICAL EDUCATION (3)
PR: CC. Development of knowledge and skills related to the instruction process of physical education. Preparation of materials and planning instruction.

PET 3422 INSTRUCTIONAL DESIGN AND CONTENT: MOVEMENT EXPERIENCES (3)
PR: CC. This course develops a variety of motor skills and includes the study of systems for analyzing movement. It prepares students to plan and conduct movement experiences in a wide variety of educational settings.

PET 3441 INSTRUCTIONAL DESIGN AND CONTENT: MIDDLE SCHOOL PHYSICAL EDUCATION (3)
PR: CC. The development of physical education content and instructional practices for middle school students. The focus is upon matching appropriate content and learning experiences to the unique needs of the pre- and early adolescent learner.

PET 3540 ADAPTED PHYSICAL EDUCATION (3)
PR: CC. A study of characteristics, programming needs and teaching of physical education for students with disabilities.

PET 3799 CAREER DECISION-MAKING AND PROFESSIONAL ETHICS (1)
PR: CC. Preparation for career decision-making activities. Monitor and continue personal-professional development plan developed in previous semester. Ethical practices for teachers. Taken concurrently with PET 3943.

PET 3943 PHYSICAL EDUCATION INTERNSHIP: MIDDLE SCHOOL (4)
PR: CC. A part-time internship in middle school physical education. Focus on the relationship of physical education to the needs of the pre- and early adolescent learner, the organization and purpose of the middle school, and application appropriate content and methodologies.

PET 4141 TRENDS AND TASKS- ELEMENTARY PHYSICAL EDUCATION (3)
PR: CC. Current trends are evaluated from a historical and philosophical perspective. Non-teaching tasks are identified as part of the professional role. Evaluate and continue personal-professional development plan developed in previous semesters. Taken concurrently with Physical Education Internship: Elementary. Physical Education Majors only.

PET 4142 TRENDS AND TASKS- SECONDARY PHYSICAL EDUCATION (1)
PR: CC. Current trends are evaluated from a historical and philosophical perspective. Non-teaching tasks are identified as part of the professional role. Evaluate and continue personal-professional development plan developed in previous semesters. Taken concurrently with Physical Education Internship: Secondary. Physical Education Majors only.

PET 4304 PRINCIPLES AND ISSUES IN COACHING (3)
The application of principles from philosophy, psychology, sociology, and physiology to competitive athletics and coaching.

PET 4353 EXERCISE PHYSIOLOGY II (3)
PR: CC. & PET 3352. A study of Exercise Physiology focusing on the adult. Includes specific populations such as the obese, heart patients, arthritics, elderly, and high performance athletes. Open to non-majors.

PET 4384 HEALTH-FITNESS APPRAISAL & EXERCISE PRESCRIPTION (3)
PR: CC. & PET 3352. Techniques in conducting health-fitness test and exercise prescription for adults. Includes
cardiovascular strength, flexibility, body composition, health risk testing, exercise prescribing, and monitoring. Open to non-majors.

PET 4401 ORGANIZATION & ADMINISTRATION OF PHYSICAL EDUCATION PROGRAMS
PR: CC. A study of organizational and administrative procedures for physical education programs in elementary and secondary schools. Includes scheduling, budget, facilities, extra-curricular programs, and the selection and supervision of staff.

PET 4404 ORGANIZATION & ADMINISTRATION OF WELLNESS PROGRAMS
PR: CC. Design and implementation of various types of wellness programs with emphasis on assessment and evaluation, management, staffing, participant adherence, program design, budgeting, legal liability, and marketing.

PET 4432 INSTRUCTIONAL DESIGN AND CONTENT: PHYSICAL EDUCATION ELEMENTARY
PR: CC. This is the second of a three-course sequence in which students study movement forms and instructional processes suitable for elementary age students.

PET 4433 INSTRUCTIONAL DESIGN AND CONTENT: PHYSICAL EDUCATION SECONDARY
PR: CC. This course prepares students to select, plan, conduct complex movement experiences for students K-6.

PET 4442 INSTRUCTIONAL DESIGN AND CONTENT: PHYSICAL EDUCATION SECONDARY II
PR: CC. Design of knowledge and skills related to the teaching of selected movement activities such as team sports, gymnastics, and physical fitness. Focus is on understanding mechanical principles utilized within those activities as well as on instructional progression and the preparation of materials for instruction at the secondary school level.

PET 4443 INSTRUCTIONAL DESIGN AND CONTENT: PHYSICAL EDUCATION SECONDARY III
PR: CC. In this course, students are prepared to plan, conduct, and evaluate complex movement experiences in games, dance, gymnastics and physical fitness appropriate for students.

PET 4422 CARE AND PREVENTION OF PHYSICAL INJURIES
PR: CC. Principles and techniques of conditioning athletes for competition; prevention and care of injuries in physical education and athletic activities.

PET 4508 INDEPENDENT STUDY: PROFESSIONAL PHYSICAL EDUCATION
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

PET 4512 SENIOR SEMINAR IN SECONDARY PHYSICAL EDUCATION

PET 4534 SENIOR SEMINAR IN ELEMENTARY PHYSICAL EDUCATION
PR: CC. Synthesis of teacher candidate's course in complete college program. Reflective evaluation of teaching experience. Required concurrently with Associate Teaching in Physical Education: Elementary. Physical Education Majors only.

PET 4542 PHYSICAL EDUCATION INTERNSHIP: ELEMENTARY
PR: CC. A part-time internship in elementary school physical education. Focus on the nature of the total elementary school curriculum, characteristics of students, and application of appropriate content and instructional competencies. (S/U only.)

PET 4544 PHYSICAL EDUCATION INTERNSHIP: SECONDARY
PR: CC. A part-time internship in high school level physical education with focus on the relationship of physical education to the needs of the early adolescent and the implementation of appropriate content and methodology. (S/U only.)

PET 4547 ASSOCIATE TEACHING PHYSICAL EDUCATION: ELEMENTARY
PR: CC. A full-time internship in the elementary school in which the student undertakes the full range of teaching responsibilities in elementary physical education. May not be repeated. (S/U only.)

PET 4548 ASSOCIATE TEACHING PHYSICAL EDUCATION: SECONDARY
PR: CC. A full-day internship in middle, junior or senior high school physical education programs with focus on the implementation of appropriate content and methodology to meet the needs of secondary students. (S/U only.)

PET 4549 ATHLETIC TRAINING PRACTICUM
PR: PET 4622. A ten-week training room practicum on skills in preventive strapping and review first aid and rehabilitation techniques, followed by a five-week practicum with local high schools or professional teams. Enrollment in these courses requires admission to the Physical Education program.

PSYCHOLOGICAL AND SOCIAL FOUNDATIONS
EDF 3122 LEARNING AND THE DEVELOPING CHILD
PR: General psychology and admission to College of Education. Preadolescent child growth and development, learning theory, and behavioral analysis applied to instruction and the organization and management of classroom.

EDF 3214 HUMAN DEVELOPMENT AND LEARNING
PR: General psychology and admission to College of Education. Application of respondent and operant learning principles to classroom learning, teaching models for different instructional goals, analysis of teacher behavior, micro-teaching.

EDF 3228 HUMAN BEHAVIOR AND ENVIRONMENTAL SELECTION -6A -XMW
PR: Upper level standing. A study of philosophy of education with an emphasis on aspects that are relevant to an understanding of the issues and problems of American education.

EDF 3304 SOCIAL FOUNDATIONS OF EDUCATION -XMW
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EDF 4050 DIRECTED STUDY: EDUCATIONAL FOUNDATIONS
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

EDF 4090 DIRECTED STUDY: EDUCATIONAL FOUNDATIONS
PR: Senior Standing. To extend competency in teaching field. Offered only as a scheduled class.

EDF 5136 ADOLESCENCE
PR: Senior Standing. Study of the educational, intellectual, personality, physical, social and vocational factors in adolescence and their importance for school personnel.

EDF 5285 PROGRAMMED INSTRUCTION AND TEACHING MACHINES
PR: Senior Standing. Principles for programming in the several academic subjects.

EDF 5547 AMERICAN DEMOCRACY AND PUBLIC EDUCATION
PR: Senior Standing. Interdependence of the public school and democracy in the United States and the responsibility of the school in fostering and strengthening basic democratic principles.

IDS 3115 VALUES AND CHOICES -6A -XMW
PR: Senior Standing. An in-depth examination of values and their relationship to choices in contemporary society using historical perspective and inquiry of moral/ethical dilemmas. Available to majors or
SCE 5937 SELECTED TOPICS IN SCIENCE EDUCATION  (1-4)
May be repeated when topics are not duplicated.

SOCIAL SCIENCE EDUCATION
SSE 4333 TEACHING MIDDLE GRADE SOCIAL SCIENCE  (3)
This introductory course is concerned with the identification of the major content areas selected from the various social sciences. Topics related to selecting, organizing, and sequencing teaching materials and methods related to the unique problems of teaching teenage youth are studied. Field work is required.

SSE 4334 SECONDARY SOCIAL SCIENCE EDUCATION  
TEACHING METHODS  (3)
PR: SSE 4333. This course is designed to identify and study selected techniques and strategies used in social science education instruction and prepare the student for the teaching profession. Emphasis is placed upon the learner's ability to demonstrate skill in selecting methods, techniques, materials, and evaluative forms. Field work is a requirement.

SSE 4380 GLOBAL AND MULTICULTURAL PERSPECTIVES 
IN EDUCATION - XMW  (3)
PR: EDG 3604 and EDG 4620, or CI. Examination of the major issues surrounding global and multicultural perspectives in education (Available to non-education majors.)

SSE 4640 COMMUNICATION SKILLS IN THE 
SOCIAL STUDIES  (2)
PR: CC. Specialized independent study determined by the student's needs and interests. Learners will demonstrate competence in various social studies communications skills. (S/U only.)

SSE 4670 ECONOMICS USA: PRINCIPLES OF ECONOMICS 
FOR TEACHERS  (3)
A television course focusing on content and teaching methodology related to micro/macro economic principles. (S/U only.)

SSE 4936 SENIOR SEMINAR IN SOCIAL SCIENCE 
EDUCATION  (2)
PR: Senior standing; CR: SSE 4940. Synthesis of teacher candidate's courses and preparation for the professional interview and application process.

SSE 4940 INTERNSHIP: SOCIAL SCIENCE EDUCATION  
(1-12) CR: SSE 4936. One full semester of internship in a public or private school. In special programs where the internship is distributed over two or more semesters, students will be registered for credit which accumulates from 9 to 12 Semester hours. (S/U only.)

SSE 5644 ECONOMIC DECISION-MAKING FOR TEACHERS  (3)
PR: Admission to the College of Education or CC. Provides teachers (K-12) with content related to the operation of businesses in a market economy. Teachers analyze economic/business concepts from the perspective of individuals currently operating businesses in the Tampa Bay area. Focus of the instruction is on the application of content to K-12 instructional programs.

SPECIAL EDUCATION
EED 4011 INTRODUCTION TO BEHAVIOR DISORDERS  (3)
PR: EEX 3010, or equivalent or CI. Survey of emotional, behavioral and social disorders in children and youth. History of the field, definitions, classifications, theoretical approaches, intervention techniques, classroom management, service delivery models, trends and issues.

EED 4905 INDEPENDENT STUDY: BEHAVIOR DISORDERS  
(1-3) PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated up to a maximum of 3 credit hours when subjects vary. (S/U only.)

EED 4908 DIRECTED STUDY: BEHAVIOR DISORDERS  
(1-3) PR: Senior standing. To extend competency in teaching field.

EED 4941 UNDERGRADUATE SUPERVISED PRACTICUM 
IN BEHAVIOR DISORDERS  (1-8) PR: EEX 3010 and major in behavior disorders. Supervised field experience in assessment, classroom management, and clinical teaching with children who have emotional and
behavioral disabilities. Repeatable up to 6 credit hours. (S/U only.)

**EEX 3010 INTRODUCTION TO SPECIAL EDUCATION**
Characteristics and needs of children who have learning disabilities, emotionally handicaps, hearing impairments, mentally retardation, physically handicaps, speech impairments, visual limitation, and who are gifted and talented.

**EEX 4070 INTEGRATING EXCEPTIONAL STUDENTS IN THE REGULAR CLASSROOM**
Designed for non-special education majors. Includes basic identification techniques and strategies to promote academic and social integration and interaction of "mainstreamed" exceptional students. Concurrent field experience projects are included. No credit for department majors.

**EEX 4221 EDUCATION ASSESSMENT OF EXCEPTIONAL STUDENTS**
PR: EDF 3214 and EEX 3010. Taken concurrently with EED 4941, ELD 4941, or EMR 4941. Introduction to assessment of exceptional students through formal and informal techniques. Emphasis placed on the interpretation of information for educational programming and individualization of instruction.

**EEX 4243 EDUCATION OF THE EXCEPTIONAL ADOLESCENT AND ADULT**
PR: EEX 3010 or equivalent or Cl. Procedures for implementing educational programs for exceptional adolescents and adults. Topics include service delivery, curriculum, academic remediation, advocacy, utilization of ancillary services, alternative programs, and community resources.

**EEX 4604 BEHAVIOR MANAGEMENT FOR SPECIAL NEEDS AND AT-RISK STUDENTS**
PR: EEX 3010. Taken concurrently with EED 4941, ELD 4941, or EMR 4941. Techniques to prevent, analyze, and manage challenging and disruptive classroom behavior as well as teaching social skills.

**EEX 4846 CLINICAL TEACHING IN SPECIAL EDUCATION**
PR: EEX 3010. Taken concurrently with EED 4941, ELD 4941, or EMR 4941. Techniques to prevent, analyze, and manage challenging and disruptive classroom behavior as well as teaching social skills.

**EEX 4905 INDEPENDENT STUDY: EXCEPTIONAL STUDENT EDUCATION**
Offered to the student until competency in teaching is extended. May be repeated up to 3 credit hours when subjects vary. (S/U only.)

**EEX 4909 DIRECTED STUDY: EXCEPTIONAL STUDENT EDUCATION**
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

**EEX 4935 SENIOR SEMINAR IN EXCEPTIONAL STUDENT EDUCATION**

**EEX 4940 INTERNSHIP: EXCEPTIONAL STUDENT EDUCATION**
CR: EEX 4936. One full semester of internship in an accredited public or private school. (S/U only.)

**EEX 5752 WORKING WITH FAMILIES: A PLURALISTIC PERSPECTIVE**
PR: Graduate standing or Cl. The impact of the socio-cultural environment on the education of at-risk and handicapped children; family systems theory, principles of multicultural education, strategies for working effectively with families of school-age children, diverse cultures and family structures represented in society.

**EGL 5051 NATURE AND NEEDS OF THE GIFTED**
Characteristics and education needs of gifted children and youth. Emphasis is on five types of giftedness as defined by National Department of Education: (1) intellectual giftedness, (2) specific academic aptitude, (3) visual and performing arts, (4) leadership and (5) kinesthetic.

**EGI 5352 THEORY AND DEVELOPMENT OF CREATIVITY**
Exploration of the concept of creativity, its factors, measurement, and applicability to education. Opportunities are given to work with children in a laboratory setting and to prepare materials to be used with small groups of children.

**ELD 4011 INTRODUCTION TO SPECIFIC LEARNING DISABILITIES**
PR: EEX 3010 or Cl. Characteristics, needs and abilities of children with SL. Emphasis is on theories, issues, trends, and philosophy of problems for such children.

**ELD 4905 INDEPENDENT STUDY: SPECIFIC LEARNING DISABILITIES**
PR: Cl. Specialized independent study determined by student's needs and interests. May be repeated up to 3 credit hours when subjects vary. (S/U only.)

**ELD 4909 DIRECTED STUDY: SPECIFIC LEARNING DISABILITIES**
PR: Senior standing. To extend competency in teaching field.

**EMR 4941 UNDERGRADUATE SUPERVISED PRACTICUM IN SLD**
PR: EEX 3010 and major in Specific Learning Disabilities. Supervised field experiences in assessment, behavior management and clinical teaching with classes for children who have specific learning disabilities. Repeatable up to a total of 6 hours. (S/U only.)

**EMR 4901 INTRODUCTION TO MENTAL RETARDATION**
PR: EEX 3010. Introduction to the classification, diagnosis, characteristics, and treatment of children with mental retardation.

**EMR 4320 EDUCATING THE SEVERLY/PROFOUNDLY HANDICAPPED**
PR: EMR 3011 or Cl. Emphasis on educational methods and materials for teaching students with severe/profound handicaps. Practicum/field experience linkage.

**EMR 4905 INDEPENDENT STUDY: MENTAL RETARDATION**
PR: Cl. Specialized independent study determined by the student's needs and interests. May be repeated when subjects vary. (S/U only.)

**EMR 4909 DIRECTED STUDY: MENTAL RETARDATION**
PR: Senior standing. To extend competency in teaching field. Offered only as a scheduled class.

**EMR 4941 UNDERGRADUATE SUPERVISED PRACTICUM IN MENTAL RETARDATION**
PR: EEX 3010 and major in Mental Retardation. Supervised field experiences in assessment, behavior management, and clinical teaching with children who have mental retardation. Repeatable up to a total of 6 hours credit. (S/U only.)

**EPH 5051 ADVANCED THEORIES IN MOTOR AND PHYSICAL DISABILITIES**
PR: EEX 3010 or Cl. Biological and functional aspects of motor and physical health disabilities, including dysfunctions in central nervous system covering motor, sensory, language and psychological disorders.

**EPH 5321 EDUCATIONAL STRATEGIES FOR PHYSICALLY AND MULTIHANDICAPPED STUDENTS**
PR: EPH 5051. Educational management of students with cerebral palsy, motor disabilities and multi-handicapped conditions including rehabilitation and other community services.

**THEATRE EDUCATION**
**EDG 4320 INTRODUCTION TO CREATIVE DRAMA**
This course for classroom teachers introduces the theory and practice of creative drama as it applies to use by elementary, middle school and secondary school teachers. Beginning with a study of dramatic play as it relates to human development, the course includes basic strategies when using pantomime, voice improvisation, theatre games,
and role playing and story dramatization.

THE 4722 THEATRE FOR PRE-SECONDARY SCHOOLS: 
THE PRODUCTION PROCESS (3)
The play production process as it applies to theatre artist-in-schools programs, including development of related classroom workshops and preparation of study guides, and educational program materials as well as design, direction and rehearsal of play and touring methods. May be repeated for elective credit two times; once for major credit.

THE 4723 THEATRE FOR PRE-SECONDARY SCHOOLS: 
THE PERFORMANCE PROCESS (3)
The artistic process of performing for various school audiences and practice conducting classroom workshops following each performance. May be repeated for elective credit two times; once for major credit.

THE 4761 METHODS OF TEACHING THEATRE FOR ADOLESCENTS (3)
Methods of effective drama and theatre instruction in middle school, junior and senior high schools, recreation centers, community and professional theatres.
# COLLEGE OF ENGINEERING

**CHEMICAL ENGINEERING**


**CIVIL AND ENVIRONMENTAL ENGINEERING**


**COMPUTER SCIENCE AND ENGINEERING**


**ELECTRICAL ENGINEERING**


**INDUSTRIAL AND MANAGEMENT SYSTEMS ENGINEERING**


**MECHANICAL ENGINEERING**


**BASIC AND INTERDISCIPLINARY ENGINEERING**

EGN 1002 ENGINEERING ORIENTATION

(0) The role of engineering in society, characteristics of different fields of engineering, required preparation for engineering careers, techniques and approaches used by engineers in their profession. (S/U only.)

EGN 2031 HISTORY OF TECHNOLOGY - HP

(3) Covers the evolution of technology and its influence on society from prehistoric man to the modern day. Topics include: seven technological ages of man, methods of producing power, materials, transportation, communication and calculation, and technology and society.

EGN 2206 ENGINEERING WITH COMPUTERS

(2) PR: EGN 2210. Fundamental concepts in engineering and computer applications. Examples chosen from various areas of engineering to illustrate design modelling and analysis with computer assistance. Some topics involve laboratory.

EGN 2292 COMPUTER TOOLS FOR ENGINEERS

(3) PR: MAC 3281. Students will be introduced to computer based engineering tools and their application to the solution of engineering problems. The programming language, FORTRAN, will be the most emphasized tool, but coverage will also be given to other engineering/mathematical tools such as equation solving tools and spreadsheets.

EGN 3311 STATICS

(3) PR: PHY 3348. Principles of statics, mechanical equilibrium, forces, moments, plane trusses. Lec.-pro.

EGN 3443 SYSTEM DYNAMICS

(2) PR: PHY 3348. Descriptive introduction to thermodynamic concepts of energy, entropy, work and heat. Properties of ideal and real substances. Applications: power production and refrigeration, phase equilibria.

EGN 3373 INTRODUCTION TO ELECTRICAL SYSTEMS


EGN 3374 INTRODUCTION TO ELECTRICAL SYSTEMS II

(3) PR: EGN 3373. Continuation of EGN 3373.

EGN 3375 INTRODUCTION TO ELECTRICAL SYSTEMS III

(3) PR: EGN 3373. Continuation of EGN 3373 or EGN 3374.

EGN 3343 SYSTEM DYNAMICS

(3) CR: EML 4041; PR: EGN 3321, EGN 4450, PHY 3349. Dynamic analysis of electrical, mechanical, hydraulic and thermal systems; Laplace transforms; numerical method; use of computers in dynamic systems.

EGN 3443 ENGINEERING STATISTICS

(3) PR: MAC 3283. An introduction to the basic concepts of statistical analysis with special emphasis on engineering applications.

EGN 3613C ENGINEERING ECONOMY

(3) A study in analyzing the economic limitations imposed on engineering activities using basic models which consider the time value of money.

EGN 4366 MATERIALS ENGINEERING II

(3) PR: EGN 3365. Applications and structure property relationships of commonly used engineering materials. Steel, non-ferrous alloys and their welding, heat treatment and processing. Introduction to ceramic and polymeric materials.

EGN 4420 NUMERICAL METHODS OF ANALYSIS


EGN 4469 INTRODUCTION TO LINEAR SYSTEMS

(3) PR: MAC 3282. Study and application of matrix algebra, differential equations and calculus of finite differences.

EGN 4831 TECHNOLOGY AND SOCIETY

(3) Non-technical survey of engineering activities: utilities, nuclear power, genetics, weaponry, space, etc. Students conduct individual in-depth study of environmental/ethical problem, as S/U only.

EGN 4905 INDEPENDENT STUDY

(1-5) PR: CI. Specialized independent study determined by the students' needs and interests. May be repeated up to 15 credit hours. (S/U only.)
EGN 4930 SPECIAL TOPICS IN ENGINEERING (1-3) PR: CI. New technical topics of interest to engineering students. May be repeated for different topics up to 9 hours.

EGN 4521 ENGINEERING ANALYSIS I (3) PR: MAP 4302. Vector methods of electromagnetism and fluid mechanics. Vector operators, line and flux integrals, potential and transport theorems, applications.


EGN 5424 ENGINEERING ANALYSIS IV (3) PR: MAC 4302 or CC. Analytic functions, conformal mapping, residue theory. Laurent series, transforms. Applications to various problems in engineering and physics.

EGN 5425 ENGINEERING ANALYSIS V (3) PR: EGN 4450 and MAP 4302, or CC. Survey of theory and software for matrix computations: factorization methods, least squares and pseudoinverses, eigenvector algorithms. Special matrices and representations for control system and finite element applications.

EGS 1113 INTRODUCTION TO DESIGN GRAPHICS (3) An introduction to the basic principles of engineering design. The course will include the graphic projective systems used in engineering drawing and design. Methods of graphic communication and graphic analysis of engineering design problems will be investigated.

CHEMICAL ENGINEERING


ECH 3264C TRANSPORT PROCESSES I (3) PR: ECH 3023. Design, sizing, and selection of fluid flow and heat transfer equipment to satisfy process demands. Lecture/laboratory.


ECH 4123C PHASE AND CHEMICAL EQUILIBRIA (3) PR: For majors, ECH 3023; for non-majors ECH 3023, CHM 4410. Correlation of thermodynamic properties of real systems and solutions. Description of multicomponent, multiphase systems in equilibrium. Applications to separation processes and reactor design. Lecture/laboratory.

ECH 4244L CHEMICAL ENGINEERING LABORATORY II (2) CR: ECH 4415C. PR: ECH 3264C, ECH 3702, EML 3303, or CI. Engineering laboratory experiments in Chemical Engineering Processes: fluid flow, heat transfer, phase and chemical equilibria, and reacting systems.

ECH 4265C TRANSPORT PROCESSES II (3) PR: ECH 3264C. Design, sizing, and selection of mass transfer equipment. Absorption, distillation, extraction, humidification. Lecture/laboratory.


ECH 4415C REACTING SYSTEMS (3) CR: ECH 4244L. PR: ECH 4265C, ECH 4123C. Equilibrium and rate phenomena in reacting systems. Description of homogeneous chemical reactors for design and control. Lecture/laboratory.
product development environment, and a detailed examination of several product areas.

CES 4910 DIRECTED RESEARCH IN BIOENGINEERING (1-3)
PR: CI. Directed research in an area of biomedical engineering or engineering biotechnology. May be repeated up to 4 credit hours.

CES 5930 SPECIAL TOPICS III (1-4)
PR: CI. May be repeated up to 9 credit hours.

CES 5931 SPECIAL TOPICS IV (1-4)
PR: CI. May be repeated up to 9 credit hours.

CIVIL AND ENVIRONMENTAL ENGINEERING

CEG 4011 SOIL MECHANICS I (3)
PR: EGN 3353C. Fundamental and experimental concepts in soil mechanics with emphasis on soil properties, soil moisture, soil structure, and shearing strength.

CEG 4011L GEOTECHNICAL LABORATORY (1)
CR: CEG 4011. Demonstrates and experiments verifying theoretical bases of Geotechnical Engineering. One hour lecture and two laboratory hours per week.

CEG 4012 SOIL MECHANICS II (3)
PR: CEG 4011. Design of retaining walls, earth slopes, foundations to control settlement, soil stabilization and foundations subjected to dynamic loads. Computer applications to soil mechanics will be covered.

CEG 4801 GEOTECHNICAL DESIGN (2)
PR: CEG 4011. Design of geotechnical systems including bases, foundations, embankments, and dams.

CEG 5115 FOUNDATION ENGINEERING (3)
PR: CEG 4011 or CI. Design of shallow foundations, cantilevered and anchored retaining walls, piling, drilled piers and special foundations. Computer applications to geotechnical engineering are covered.

CEG 5205 LABORATORY TESTING FOR GEOTECHNICAL ENGINEERS (3)
PR: CEG 4011 or CI. Both routine and advanced forms of soil testing are covered. Emphasis is placed on procedures and application of results to design.

CES 3102 STRUCTURES I (3)
PR: EGN 3331. Analysis of simple structural systems, both determinate and indeterminate. Introduction to the use of methods of indeterminate structures.

CES 4008 STRUCTURES AND THE URBAN ENVIRONMENT FOR NON-ENGINEERS - 6A - XMW (3)
This course reviews the best works of structural engineering to indicate how current technology and social context affects structural form, to familiarize students with relevant structural principles, and to introduce the concept of structural art.

CES 4141 MATRIX STRUCTURAL ANALYSIS (3)

CES 4581 COMPUTER AIDED STRUCTURAL DESIGN (3)
PR: CES 4141. Computer aided structural analysis and design using existing finite element program, static dynamic loading.

CES 4605 CONCEPTS OF STEEL DESIGN (3)
PR: CES 4102. Introduction to steel design and AISI Manual of Steel Construction: Design of tension members, compression members, beams, beam columns; and bolted, welded, and riveted connections.

CES 4618 STRUCTURAL DESIGN STEEL (2)
PR: CES 4605. Design of structures made of steel.

CES 4702 SPECIAL TOPICS OF CONCRETE DESIGN (3)

CES 4704 STRUCTURAL DESIGN-CONCRETE (2)

CES 4820C TIMBER AND MASONRY DESIGN (3)
PR: CES 3102, CES 4702. Fundamentals of timber design including beams, columns, connections and formwork. Introduction to masonry design including design of beams, walls, columns, and pilasters.

CES 5105C ADVANCED MECHANICS OF MATERIALS I (3)
PR: EGN 3331, MAP 4302. Analytical study of the mechanical behavior of deformable solids. Basic concepts, stress and strain transformations, special topics in beams, introduction to theories of elasticity, and bending of thin plates.

CES 5209 STRUCTURAL DYNAMICS (3)
PR: CES 3102. Behavior of structural components and systems when subjected to periodic dynamic loads.

CES 5715C PRESTRESSED CONCRETE (3)
PR: CI. Fundamental principles of prestressing; calculation of losses; stress analysis and design of simple beams for flexure and shear. Examples of prestress applications.

CGN 3021L CIVIL ENGINEERING LABORATORY (2)
PR: CES 3102, EGN 3363, EGN 3365. A laboratory experience in departmental facilities including the subject areas of structures, materials, fluids, transportation, soils, engineering mechanics, environmental engineering, and computer assisted data acquisition.

CGN 4122 ENGINEERING CONTRACTS, SPECIFICATIONS AND ETHICS - 6A - XMW (3)
Focus on engineering responsibilities in the technical aspects of preparing contracts and specifications. Objectives are to teach the student their legal and ethical responsibilities in the preparation of contracts and specifications. Make the student aware of technical problems in the preparation of specifications; bid documents and contracts. Emphasis of ethics of engineer-client agreements.

CGN 4851 CEMENT AND CONCRETE DESIGN (2)
PR: EGN 3365L. Classifications and production of cements. Design and testing of concrete mixes to produce desired properties.

CGN 4905 INDEPENDENT STUDY (1-5)
PR: CC. Specialized independent study determined by the students' needs and interests. May be repeated up to 15 credit hours. (S/U only.)

CGN 4911 RESEARCH IN CIVIL ENGINEERING AND MECHANICS (1-4)
PR: CC.

CGN 4914 SENIOR PROJECT (2)
PR: CI. Problem-solving experience and training for seniors in research and/or design projects. Written final reports are required.

CGN 4933 SPECIAL TOPICS IN CIVIL ENGINEERING AND MECHANICS (1-5)
PR: CI. New technical topics of interest to civil engineering students.

CGN 5933 SPECIAL TOPICS IN CIVIL ENGINEERING AND MECHANICS (1-5)
PR: CI. New technical topics of interest to civil engineering students. May be repeated up to 6 credit hours.

CWR 4103 WATER RESOURCES ENGINEERING (3)
PR: CWR 4202. A study of the engineering principles involved in sustaining and managing the quantity and quality of water available for human activities with particular emphasis on surface water and ground water hydrology.

CWR 4202 HYDRAULICS (3)
PR: EGN 3353. Fundamental and applied aspects of pipe flow, free surface flow, and unsteady flow for hydraulic systems.

CWR 4810 HYDRAULIC DESIGN (2)
PR: CWR 4103, 4202. Design of hydraulic systems, including drainage, water supply, and flood control.

EMA 4324 CORROSION OF ENGINEERING MATERIALS I (3)
PR: EGN 3365L. Principles of electrochemical corrosion and the representation of corrosion processes by polarization diagrams. Origin and prevention of the localized forms of corrosion and approaches to corrosion control.

EMA 4703 FAILURE ANALYSIS AND PREVENTION (3)
ENV 3001 ENVIRONMENTAL ENGINEERING
CR: ENG 3353. An introduction to various aspects of environmental problems faced by today's society. Topics covered are: air pollution, water pollution, noise pollution, solid waste management, ionizing radiation, disease transmission, and food protection.

ENV 4004L ENVIRONMENTAL ENGINEERING LABORATORY (1)
PR: ENV 4502. Laboratory experience in the measuring of environmental parameters.

ENV 4101 AIR POLLUTION CONTROL
PR: EGN 3353. Behavior and effects of atmospheric contaminants and the principles of making measurements in the air environment. Basic concepts of meteorology and control technology are discussed. Regulatory aspects and air pollution standards are covered.

ENV 4400 CHEMICAL ASPECTS OF ENVIRONMENTAL ENGINEERING
PR: One year general chemistry. Environmental quality and treatment parameters; sampling and sample preservation techniques; selected measurement techniques; interpretation and analysis of data; emphasis on water chemistry principles. Course is restricted to students pursuing the environmental engineering option in Civil Engineering and Chemical Engineering.

ENV 4432 WATER QUALITY AND TREATMENT
PR: CWR 4202. An introduction to municipal water supply and waste water treatment. Topics include water requirements and waste volumes, water quality, physical and chemical treatment processes, and advanced wastewater treatment processes.

ENV 4452 WATER SYSTEMS DESIGN
PR: EGN 3353. Corequisite ENV 4503. A design oriented course which utilizes the theory obtained in the Unit Operations course to design both industrial and domestic water treatment and water transport systems. It emphasizes the design procedures normally used in engineering practice.

ENV 4502 ENVIRONMENTAL UNIT OPERATIONS
PR: EGN 3343, EGN 3353. CR: ENV 3001. The theory and the design of unit operations normally used in the practice of environmental engineering, such as agitation and mixing of liquids, filtration, leaching, gas absorption, sedimentation and clarification, drying, and evaporation.

ENV 4531 WASTEWATER SYSTEMS DESIGN
PR: ENV 4503. Emphasis is placed upon design practice and economics for a comprehensive design of a wastewater system and a collection system.

ENV 4552L ENVIRONMENTAL UNIT OPERATIONS AND PROCESSES LABORATORY
PR: EGN 3353, ENV 4004L. CR: ENV 4503. Experimental work of the theory and design practices learned in Unit Operations and Unit Processes lecture courses. It provides the student familiarity with the development of bench and pilot plant processes and operations used in environmental engineering.

ENV 5105 AIR RESOURCE MANAGEMENT
PR: Cl. Air pollution source impacts on ambient air quality, modeling, regulatory approaches, source control strategies, and surveillance.

ENV 5345 SOLID AND HAZARDOUS WASTE CONTROL
PR: Cl. Treatment practices and design of waste handling systems to include: land treatment, pre-treatment, incineration, resource recovery, recycle, waste elimination.

ENV 5614 ENVIRONMENTAL RISK ANALYSIS
PR: Cl. Study of comprehensive application of risk analysis techniques for environmental control and protection purposes.

ENV 3010 ENVIRONMENTAL ENGINEERING LAND SURVEYING
PR: EEL 4851 or Graduate Standing. Principles of land surveying for engineering practice. Traverses, levels, boundary surveys, route surveys, coordinate geometry, and mapping.

TTE 4004 TRANSPORTATION ENGINEERING I
PR: EGN 3321. Principles of surface transportation system development, design, and operations; administration, modal characteristics, capacities, and functional classifications; vehicle kinematics, human factors and minimum design standards; traffic flow theory and queuing, capacity and signalization; transportation planning and economics.

TTE 4005 TRANSPORTATION ENGINEERING II
PR: TTE 4004. CR: SUR 3140. Techniques for the geometric route design of surface transportation systems; horizontal and vertical alignments. Spiral curves, superelevations and earthwork analysis; drainage, soils, and a rigid and flexible pavement design; right-of-way acquisition and Environmental Impacts; site layout & design, and operation of alternate models including bus, air, rail, water, and pipeline facilities and terminals.

TTE 4821 TRANSPORTATION SYSTEMS DESIGN
PR: TTE 4005. Comprehensive surface transportation design laboratory experience involving function design, traffic and facility sizing, complete alignments, site surveying & layout plan and quantity preparation with computerized designed applications.

TTE 5501 TRANSPORTATION PLANNING AND ECONOMICS
PR: College Algebra & Cl. Fundamentals of urban transportation planning: trip generation, trip distribution, modal split, traffic assignment. Introduction to environmental impact analysis, evaluation an dchoice of transportation alternatives.

COMPUTER SCIENCE AND ENGINEERING
CAP 5400 DIGITAL IMAGE PROCESSING
PR: EEL 4851C or Graduate Standing. Image formation, sources of image degradation, image enhancement techniques, edge detector operators, and threshold selection, low-level processing algorithms for vision, image data compression.

CAP 5625 INTRODUCTION TO ARTIFICIAL INTELLIGENCE
PR: EEL 4851C. Basic concepts, tools and techniques used to produce and study intelligent behavior. Organizing knowledge, exploiting constraints, searching spaces, understanding natural languages, problem solving strategies, etc.

CAP 5682 EXPERT AND INTELLIGENT SYSTEMS
Basic concepts, techniques and tools for the design and implementation of expert and intelligent systems. Knowledge representation, inference methods, knowledge acquisition methods, and some advanced concepts. Tools to facilitate construction of expert and intelligent systems.

CDA 4100 COMPUTER ORGANIZATION AND ARCHITECTURE
PR: EEL 4705. Elements of computer systems; processors, memories and switches. Register transfer representation of a computer. ALUs and their implementation. The control unit. Memory and I/O. Hardware support of operation system functions.

CDA 4203 COMPUTER SYSTEM DESIGN
PR: EEL 4705, EEL 4705L. CR: CDA 4203L. Design Methods, Top-Down design, Building Blocks, Instruction and address decoding models, minicomputer design, interfacing.

CDA 4203L COMPUTER SYSTEM DESIGN LAB
PR: EEL 4705 and EEL 4705L. CR: CDA 4203. This lab introduces the student to the concept of system design. Several projects are given including building timing circuits, memory-based and communication circuits, and microcomputer-based design, analysis and implementation.

CEN 4020 SOFTWARE ENGINEERING
PR: EEL 4851C. An overview of software engineering techniques for producing high quality software. Student will participate in a software development team.

CEN 4721 USER INTERFACE DESIGN
PR: EEL 4851C. A study of the design and implementation influencing the usability of a computer system. Topics include input and output devices, graphic and multi-media interfaces, formats for interaction/
communication between computer and user, and the evaluation of usability.

CIS 4200 ETIQUETTE ISSUES AND PROFESSIONAL CONDUCT - 6A -XMW (3)
PR: Senior standing in the Department of Computer Science and Engineering. An introduction to ethical issues arising in the computer sciences, through written analysis and oral presentations of technical situations which involve ethical conflicts.

CIS 4900 INDEPENDENT STUDY IN COMPUTER SCIENCE (1-5)
PR: CI. Specialized independent study determined by the needs and interests of the student. May be repeated up to 10 credit hours. (S/U only.)

CIS 4910 COMPUTER SCIENCE  (3)

CIS 4920 MICROPROCESSOR LABORATORY (1)
CR: EEL 4705; for CS & E students CR or PR: COP 3000. Binary number systems; truth functions; Boolean algebra; canonical forms; minimization of combinational logic circuits; synchronous logic circuits in computers.

CIS 4925L LOGIC LABORATORY (3)
CR: EEL 4705

CIS 4930 SPECIAL TOPICS IN COMPUTER SCIENCE I (1-4)
PR: CI. May be repeated up to 15 credit hours.

COP 3000L COMPUTER SCIENCE LABORATORY (1)
CR: COP 3002. Laboratory for implementation of algorithms in a general purpose computer language.

COP 3002 INTRODUCTION TO COMPUTER SCIENCE (3)
CR: COP 3000L. Introduction to the concepts of algorithmic formulation of problems for computer solution and the general abstract operations used in these formulations.

COP 3005 MICROPROCESSOR CONCEPTS (3)
PR: COP 3000L. An examination of a modern programming language emphasizing programming concepts and design methodology.

COP 4020 PROGRAMMING LANGUAGES (3)
PR: EEL 4851C. An introduction to programming languages, survey of language types and design of translators and interpreters.

COP 4023 COMPARISON OF PROGRAMMING LANGUAGES (3)
PR: EEL 4851C. A comparative study of procedural and nonprocedural computer languages, emphasizing the fundamental differences in information binding, string and data structures manipulation, control and I/O structures in different languages.

COP 4312 SYMBOLIC COMPUTER FOR ARTIFICIAL INTELLIGENCE (3)
PR: COP 3000L. An examination of the fundamental symbolic computing and its role in artificially intelligent computers. Includes program writing in LISP with emphasis on procedural and data abstraction.

COP 4400 COMPUTER SYSTEMS (3)
PR: COP 3000L. Principles of computer organization, machine, and programming language programming.

COP 4600 OPERATING SYSTEMS (3)
PR: EEL 4851C. Introduction to systems programming. Design of operating systems. Concurrent processing, synchronization, and storage management policies.

COT 3100 INTRODUCTION TO DISCRETE STRUCTURES (3)
PR: MAC 3281 or equivalent. Introduction to set algebra, propositional calculus and finite algebraic structures as they apply to computer systems.

COT 4210 INTRODUCTION TO AUTOMATA THEORY AND FORMAL LANGUAGES (3)
PR: EEL 4851C. Introduction to the theory and application of various types of computing devices and the languages they recognize.

COT 4400 ANALYSIS OF ALGORITHMS (3)
PR: EEL 4851C. Design principles and analysis techniques applicable to various classes of computer algorithms frequently encountered in practice.

EEL 4705L LOGIC DESIGN (3)
PR: EGN 3373, CR: EEL 4705L; for CS & E students CR or PR: COP 3002. Binary number systems; truth functions; Boolean algebra; canonical forms; minimization of combinational logic circuits; synchronous logic circuits in computers.

EEL 4743L MICROPROCESSOR LABORATORY (1)
CR: EEL 4744. Laboratory for Microprocessor use and evaluation.

EEL 4744 MICROPROCESSOR PRINCIPLES AND APPLICATIONS (3)

EEL 4748 MICROPROCESSOR-BASED SYSTEM DESIGN AND APPLICATION (3)
PR: EEL 4757, EEL 4743L. Study of techniques for design of microprocessor-based systems used in various applications. Includes a project on development of an experimental application system.

EEL 4781C DISTRIBUTED PROCESSING AND COMPUTER NETWORKS (3)
PR: COP 4600, CDA 4100. Design and analysis of distributed processing systems. Covers communication hardware and software, network operating systems, and reliability enhancement techniques.

EEL 4851C DATA STRUCTURES (3)
PR: COP 3002, COP 3000L. Fundamentals of data organization for purposes of program efficiency, clarity and simplicity will be addressed.

EEL 4852C DATA BASE SYSTEMS (3)
PR: EEL 4851C. Fundamentals of database management systems. CODASYL, network, hierarchical, and relational database systems are analyzed, and typical applications are presented.

EEL 5771 INTRODUCTION TO COMPUTER GRAPHICS I (3)
PR: CI. An introduction to the evolution of computer graphics including point-plooting, line drawing, two-dimensional transformations and graphics software packages.

COMPUTER SERVICE COURSES
(No credit for Engineering Majors)

CGS 2080 SC INTRODUCTION TO COMPUTERS AND PROGRAMMING IN BASIC - 6A (3)
An overview of computer systems and their role in society. Survey of the evolution of computer software and hardware technology with emphasis on current applications. Introduction to programming using the BASIC language.

CGS 3062 COMPUTERS AND SOCIETY (3)
This computer literacy course covers the fundamentals of hardware, software, and programming languages, presents a broad overview of data processing concepts, problems and applications for students with little or no computing background. (For non-engineering majors only.)

CGS 3462 SC PASCAL PROGRAMMING (3)
PR: CGS 3060. Structured programming implemented with the PASCAL language. Emphasis on program structure and data manipulation.

CGS 3463 SC GPSS SIMULATION (3)
PR: COP 3200. The development and execution of discrete event simulation models of real world systems using the GPSS language.

CGS 3464 SC SIMSCRIPT SIMULATION (3)

CGS 4260 SC MINI-COMPUTER APPLICATIONS (3)
PR: CGS 4405. Study of mini-computer system components, I/O devices, theory of computer operation.

COP 3120 SC COBOL PROGRAMMING I (3)

COP 3121 SC COBOL PROGRAMMING II (3)
PR: COP 3120. Advanced applications of ANSI Standard COBOL. Development of subroutines, relative I/O and data base applications as used in a comprehensive data processing environment.

COP 3200 SC FORTRAN PROGRAMMING (3)
PR: CGS 3060. Solution of scientifically oriented problems using the FORTRAN language. Particular emphasis is placed on file manipulation and system libraries.
Electrical Engineering

EEL 4657 Logic Design (3)
PR: EGN 3373. Non-majors may enroll with CC.

EEL 4411 Introduction to Communication Systems (3)
PR: EGN 3373. Application of system design to various projects.

EET 4666 Principles of Industrial Operations II (3)
PR: CC. Application of techniques developed to the operation of an industrial firm through special projects.

EEL 3505 Control Engineering (3)
PR: EEL 4705 or CC. Design, layout, simulation, and test of custom digital CMOS/VLSI chips. CMOS cell library and state-of-the-art CAD tools. Digital CMOS static and dynamic gates, flip flops CMOS array structures commonly used in digital systems. Top down design example of a bit slice processor.

EEL 4705L Logic Laboratory I (1-5)
CR: EEL 4705.

EEL 4743L Microprocessor Laboratory I (1)
CR: EEL 4744. Laboratory for microprocessor use and evaluation.

EEL 4744 Microprocessor Principles and Applications (3)

EEL 4756 Signal and Image Processing (3)
Sampling and quantization of signals and images; frequency-domain representations; transforms; filtering, convolution, and correlation; raster scanning and interlacing; color images; mask filters and parallelism; multi-rate processing; information signals.

EEL 4905 Independent Study I (1-5)
PR: CI. Specialized independent study determined by the students' needs and interests. May be repeated up to 15 credit hours. (S/U only).

EEL 4906 Project Design (2)
PR: Senior standing. An individual or team project involving the design of an electrical component system. Required of all electrical seniors.

EEL 4935, 4936, 4937 Special Electrical Topics I, II, III (1-4 each)

EEL 5250 Power System Analysis (3)
Analysis technique for AC power systems.

EEL 5344C Digital CMOS/VLSI Design (3)
PR: EEL 4705 or CC. Design, layout, simulation, and test of custom digital CMOS/VLSI chips. CMOS cell library and state-of-the-art CAD tools. Digital CMOS static and dynamic gates, flip flops CMOS array structures commonly used in digital systems. Top down design example of a bit slice processor.

EEL 5356 Integrated Circuit Technology (3)
PR: EEL 4351 or CI. Physics and Chemistry of integrated circuit and discrete device fabrication, materials limitations, processing schemes, failure and yield analysis. Laboratory is integral to the course.

EEL 5357 Analog CMOS/VLSI Design (3)

EEL 5382 Microelectronics (3)
PR: EEL 4310. Quantum mechanics with emphasis on electronic properties in atoms, molecules, and crystals; quantum statistics; energy band theory; crystal structures; defect chemistry; semiconductor properties.

EEL 5437 Microwave Engineering (3)
PR: EEL 4411, 4102, or CC. Introduction to passive and active components, devices, and circuits, including transmission lines and waveguides, employed in microwave integrated circuits and systems.

EEL 5462 Antenna Theory (3)
PR: EEL 4411 or CC. Antenna theory beginning with fundamental parameter definitions and continuing with mathematical concepts, elemental antennas and arrays.

EEL 5572 C LOCAL AREA NETWORKS AND INTERFACING (3)
PR: EEL 4512. Network components: Communication terminals, PC's telephone, etc. Basics of LAN's, Tx media topologies, access methods, and LAN characteristics. Interfacing of terminals and PC's to LAN's. NAU's and other interfering devices; interface selection. LAN design issues, repeaters, timing circuits, gateways.

EEL 5631 Digital Control Systems (3)
PR: EEL 4657. Sample data and digital control processes.

EEL 5754 Microprocessor Based Digital Signal Processing (3)
PR: EEL 4705 or CC. Arithmetic systems, processing structures, efficient algorithms. DSP hardware, TI, NEC and other DSP microprocessors; multiprocessing hardware and software. System development. Application to telecommunications and voice processing.
The study and analysis of combined human operations, from an economic viewpoint. The use of advanced methods, and autoregressing/moving average methods.

**INDUSTRIAL AND MANAGEMENT SYSTEMS**

**EIN 4304C INTRODUCTION TO INDUSTRIAL ENGINEERING** (3)  
History of industrial engineering. Introduction to basic industrial processes and controls. Students research specific industries and visit local industrial plants.

**EIN 4312C WORK ANALYSIS** (3)  
PR: EIN 3313, EGN 3443; CR: AGC 3074. Operation analysis and workspace design, work measurement, standard data, ergonomics, and labor costing.

**EIN 4313C HUMAN FACTORS** (3)  
Design of man-machine systems, by taking into consideration both human and machine capabilities and limitations.

**EIN 4333 PRODUCTION CONTROL** (3)  
PR: ESI 4312. Planning and control of production systems. Includes: forecasting and inventory control models, scheduling and sequencing, MRP, CPM/PERT, and resource requirements.

**EIN 4342 FACILITIES DESIGN I** (3)  
PR: EIN 4312 EIN 4411. Design and modification of industrial production and material handling facilities. Basic analysis techniques, use of computer programs, automated warehousing.

**EIN 4345 FACILITIES DESIGN II - XWIV** (3)  
PR: EIN 4364. CAD/CIM, complete design of a plant facility. Course to use computers and software geared toward plant design and operation. A team of students is to be responsible for the complete project.

**EIN 4411 MANUFACTURING PROCESSES** (3)  
PR: EGN 3365. The study of basic manufacturing processes and precision assembly. CAD/CAM including NC programming.

**EIN 4601L AUTOMATION AND ROBOTICS** (3)  
PR: EIN 4411. Introduction to the practices and concepts of automation as applied to material handling, inventory storage, material transfer, industrial processes and quality control.

**EIN 4933 SPECIAL TOPICS IN INDUSTRIAL ENGINEERING** (1-5)  
Prerequisite: permission of instructor or equivalent. Special topics related to economic analysis, optimization, human factors, manufacturing and automation aspect of industrial systems. Repeatable up to 5 credit hours.

**EIN 5245 WORK PHYSIOLOGY AND BIOMECHANICS** (3)  
PR: CC. Human physiological limitations encountered in the design, analysis and evaluation of man-machine systems.

**EIN 5253 HUMAN PROBLEMS IN AUTOMATION** (3)  
The study and analysis of combined human operations, automated processes, and robotics in industrial environments.

**EIN 5301C INDUSTRIAL ENGINEERING CONCEPTS** (3)  
PR: CC. Survey of industrial and management engineering methodology. Work measurement, methods, production and inventory control, and facility design.

**EIN 5322 PRINCIPLES OF ENGINEERING MANAGEMENT** (3)  
Introduction to the fundamentals of accounting, finance, management, and marketing as needed by engineers, scientists, and other professionals in managerial positions.

**EIN 5357 ENGINEERING VALUE ANALYSIS** (3)  
Statistical models for analyzing engineering alternatives from an economic viewpoint. The use of advanced engineering economy concepts in solving industrial problems.

**EIN 5388 TECHNOLOGICAL FORECASTING** (3)  
Introduction to forecasting techniques used to plan and schedule production and inventory control functions. Smoothing and decomposition time-series methods, regression methods, and autoregressing/moving average methods.

Integrating forecasting and planning into the engineering organization.

**EIN 5914 SPECIAL INDUSTRIAL PROJECTS** (1-3)  
PR: CC.

**ESI 4221 INDUSTRIAL STATISTICS AND QUALITY CONTROL** (3)  
PR: EGN 3443. Application of statistical techniques to the control of industrial processes. Control charts, acceptance sampling, design of experiments, analysis of variance and regression.

**ESI 4244 DESIGN OF EXPERIMENTS** (3)  
PR: EGN 3443. Activity forecasting models and control. Design and use of inventory control models, both designs applicable to engineering analyses. Analysis of variance and regression.

**ESI 4312 DETERMINISTIC O.R.** (3)  
PR: EGN 4450. An introduction to operations research techniques with particular emphasis on deterministic models. Linear programming, dynamic programming, goal programming, integer programming, and PERT/CPM networks are considered.

**ESI 4313 PROBABILISTIC O.R.** (3)  

**ESI 4161C COMPUTERS IN INDUSTRIAL ENGINEERING** (3)  
PR: EGN 2210. Use of micro and mini computer systems for industrial engineering applications. Review of available software packages. Use of computers for CAD/CAM systems.

**ESI 4523 INDUSTRIAL SYSTEMS SIMULATION** (3)  
PR: ESI 4313. A study of the development and analysis of computer simulation models: Monte Carlo, time-slice, and next-event. Introduction to special purpose simulation languages.

**ESI 4906 INDEPENDENT STUDY** (1-5)  
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated up to 15 credit hours. (S/U only.)

**ESI 4911 SENIOR PROJECT** (2)  
PR: EIN 4364, CR: EIN 4333, ESI 4523. Analysis and design of systems in a directed project format. Individual or group work consisting of project proposal, project activities, and final report. Student projects are directed by faculty, with chairman's approval.

**ESI 5219 STATISTICAL METHODS FOR ENGINEERING MANAGERS** (3)  
Study of statistical methods applied to engineering management problems involving estimation and prediction under conditions of uncertainty. Not open to students who have had EGN 3443.

**ESI 5236 RELIABILITY ENGINEERING** (3)  
PR: EGN 3443 or equivalent. Fundamental concepts of reliability, estimation of reliability of systems and components. Measures of availability, maintainability and reliability.

**ESI 5306 OPERATIONS RESEARCH FOR ENGINEERING MANAGEMENT** (3)  
Linear programming, non-linear programming, queueing, inventory, network analysis. Not open to students who have had ESI 4315.

**ESI 5470 MANUFACTURING SYSTEMS ANALYSIS** (3)  
PR: CC. The study of systems of manufacturing entities such as machine tools, robots, and materials handlers. Emphasis is on mathematical description of integrated systems and system optimization.

**ESI 5622 COMPUTER SIMULATION II** (3)  

**MECHANICAL ENGINEERING**

**EAS 4121 HYDRO AND AERODYNAMICS** (3)  
PR: EML 3701, MAP 4302. Advanced fluid dynamics, ideal and viscous flows, applications to flow around immersed bodies.
EML 3262 KINEMATICS AND DYNAMICS OF MACHINERY (3)  
PR: MAC 3282, PHY 3048, EGN 3321. Kinematics of machines and mechanisms; position, velocity, and acceleration analysis of mechanisms; cams; gear trains; inertia forces in mechanisms; flywheels; balancing of rotating masses.

EML 3303 MECHANICAL ENGINEERING LAB I (3)  

EML 3500 MACHINE ANALYSIS AND DESIGN I (3)  
PR: EGN 3311, EGN 3365. Stress and deflection analysis of machine parts, variable loads, endurance limits, fasteners, bearings, power transmission, code consideration of pressure and vacuum vessels, elements of design.

EML 3701 FLUID SYSTEMS (3)  
PR: EGN 3343; Principles of fluid flow; piping and duct systems; fluid machinery; metering of compressible and incompressible flow; boundary layer theory; dimensional analysis; introduction to aerodynamics.

EML 4041 COMPUTATIONAL METHODS (3)  
PR: EGN 2210, EGN 4450. Techniques to solve engineering problems using numerical methods and digital computers. Topics include roots of equations, simultaneous linear equations, numerical integration and differentiation, and curve fitting.

EML 4106C THERMAL SYSTEMS AND ECONOMICS (3)  
PR: EGN 3343. Power and refrigeration cycles; fuels and combustion; internal combustion engine cycles; co-generation; nuclear energy; methods of economic analysis.

EML 4142C HEAT TRANSFER I (3)  
PR: EML 3701, EML 4041. Conduction, convection and radiant heat transfer; thermal properties of materials; role of fluid flow in convective heat transfer; design and selection of heat exchangers.

EML 4220C VIBRATIONS (3)  

EML 4302 MECHANICAL ENGINEERING LABORATORY II (3)  
PR: EML 3303, EML 4142. Continuation of EML 3303 with emphasis on material and energy balances, stress analysis and vibrations. Lec.-lab. The Team-Project-Time Approach.

EML 4312 MECHANICAL CONTROLS (3)  

EML 4419C PROPULSION I (3)  
PR: EML 3701, EML 3500 or CI. Introduction to the design of propulsion systems. Basic analysis of internal combustion, jet and rocket engines. Application to ground and air transportation. Advanced propulsion concepts. Special topics for class discussion.

EML 4501 MACHINE DESIGN (3)  
PR: EML 3500, EML 3262. Continuation of EML 3500. Antifriction bearings, journal bearings, power transmission, shafting.

EML 4551 CAPSTONE DESIGN -XMW (3)  
PR: EML 4501. Comprehensive design or feasibility project requiring application of previously acquired engineering knowledge; use of ANSYS and CAD.

EML 4552 SENIOR MECHANICAL DESIGN (3)  
PR: EML 4551 or CC. Comprehensive design or feasibility study project. In some cases may be a continuation of EML 4551.

EML 4580 AIR CONDITIONING DESIGN (3)  

EML 4905 INDEPENDENT STUDY (1-4)  
PR: CI. Specialized independent study determined by the student's needs and interests. May be repeated up to 15 credit hours.

EML 4930 SPECIAL TOPICS IN MECHANICAL ENGR. (1-4)  
PR: CC. May be repeated up to 9 credit hours.

EML 5225 ACOUSTICS AND NOISE CONTROL (2)  

EML 5245 TRIBOLOGY (3)  

EML 5325 MECHANICAL MANUFACTURING PROCESSES (3)  
PR: CI. Description of mechanical material cutting, forming and fabrication methods, as used in modern industrial manufacturing processes.

EML 5355 MOTOR SELECTION AND CONTROL (3)  
PR: EGN 3373, EGN 3433. Standard electrical voltages; power wiring in industrial plants; NEMA motor designs, techniques for estimating motor starting times and temperature rise; motor selection; starting and operating safety interlocks; conventional motor starting and control systems; direct digital (programmable) controls; electrical code requirements for conductors and protective devices.

EML 5930 SPECIAL TOPICS III (1-4)  
PR: CC. May be repeated up to 9 credit hours.

EML 5931 SPECIAL TOPICS IV (1-4)  
PR: CC. May be repeated up to 9 credit hours.
ART

DANCE
Chairperson: T. R. Wilson; Professor: G. W. Warren; Associate Professors: S. W. Robinson-Waldrop; T. R. Wilson, L. Wimmer; Assistant Professors: C. B. Cherry, J. E. Parks, J. Travers-Neumann.

MUSIC

MUSIC EDUCATION
Director: C. P. Doane; Professor Emeritus: V. A. Bridges; Professors: C. P. Doane, J. J. Heller; Associate Professors: J. L. S. Moore, J. J. Richmond.

THEATRE

ART
ARH 2050 HISTORY OF VISUAL ARTS I - HP - FA (3)
A survey of World Art to AD 1300. Students are introduced to problems of analyzing and interpreting the art of various cultures without making the Western perspective a privileged one. Open to non-majors.

ARH 2051 HISTORY OF VISUAL ARTS II - HP - FA (3)
A survey of World Art since 1300. Students are introduced to problems of analyzing and interpreting the art of various cultures without making the Western perspective a privileged one. Open to non-majors.

ARH 3001 INTRODUCTION TO ART - 6A - HP - FA (4)
An expanded introductory treatment of basic concepts. For art majors and non-art majors.

ARH 4170 GREEK AND ROMAN ART (4)
A comprehensive study of Aegean, Mycenaean, Etruscan, Greek and Roman painting, sculpture and architecture.

ARH 4200 MEDIEVAL ART (4)
A comprehensive study of early Christian, Byzantine and Medieval painting, sculpture, architecture and manuscript illumination.

ARH 4301 RENAISSANCE ART (4)
A comprehensive study of Renaissance and Mannerist painting, sculpture and architecture in Italy and Northern Europe.

ARH 4318 VENETIAN ART (4)
PR: CI. Major monuments of Venetian art are examined to elucidate the importance of Venice as the crossroads of cultural exchanges between Islam, Byzantium and West, and the importance of Venetian art for the history of art and art criticism.

ARH 4350 BAROQUE AND ROCOCO ART (4)
A comprehensive study of the painting, sculpture and architecture in France, Italy, Spain and the Netherlands in the seventeenth and early eighteenth centuries.

ARH 4430 NINETEENTH CENTURY ART (4)
A comprehensive study of nineteenth century painting, sculpture and architecture in America and Europe. Gender/multi-cultural issues and methodologies in 19th century art are emphasized.

ARH 4450 TWENTIETH CENTURY ART (4)
A comprehensive study of painting, sculpture and architecture from Cezanne to the present in Europe and the United States. Required of all art majors.

ARH 4455 MODERN POLITICAL ICONOGRAPHY - XMW (4)
PR: CI. The course explores art in which political themes are considered to be the comprehensive focus of the artist's aesthetic decisions. The dominant iconographic theme is the iconography of revolution, rebellion, and other forms of political struggle in 20th Century art and film.

ARH 4630 ORIENTAL ART (4)
An introduction to concepts of the arts of China, Japan and other Far Eastern countries.

ARH 4547 BUDDIST ART (4)
PR: CI. This course examines one important aspect of Asian artistic production. Buddhist art begins in India and travels via the Himalayas and Southeast Asia to East Asia, touching on artistic expression of major principles and practices, changes in art as the religion comes in contact with pre-existing cultures and modern artistic practice.

ARH 4554 JAPANESE PRINTS (4)
This course examines one important aspect of Asian artistic production. "Japanese Prints" concentrates on the period from 1615 to the present and distinguishes schools, styles, artists, subjects, patronage patterns, and technical matters. The role of prints within society and on Western art is examined throughout.

ARH 4557 CHINESE ART (4)
PR: CI. Chinese art proceeds chronologically, from the neolithic era up to the contemporary art world. The course considers cultural, linguistic, technical, philosophical, political and religious influences on the art works produced by this ancient society.

ARH 4710 HISTORY OF PHOTOGRAPHY - 6A - XMW (4)
PR: CI. Comprehensive overview of the history of photography from its inception to the present day with an emphasis on the relationship of photography to the visual arts and popular culture.

ARH 4790 SELECTED TOPICS IN THE HISTORY OF FILM (4)
In-depth investigation of a selected period, development, or school in the history of film as art. May be repeated.

ARH 4796 CRITICAL STUDIES IN ART HISTORY - 6A (4)
PR: CI. Specialized intensive studies in art history. Specific subject matter varies. To be and numbered at each course offering. May be repeated for different topics only.

ARH 4937 SEMINAR IN THE HISTORY OF ART HISTORY (4)
PR: Four courses in Art History at the 4000 level. CI. An examination of the origins of Art History as a discipline and changing nature of Art History from Vasari to the present.

ARH 5385 CULTURAL AND INTELLECTUAL HISTORY OF RENAISSANCE AND BAROQUE ART (4)
A course in which Renaissance and Baroque theories of art are treated as part of general cultural and intellectual history.

ARH 5451 CULTURAL AND INTELLECTUAL HISTORY OF MODERN ART (4)
A course in which theories of modern artists, and of critics and historians of Modernism are treated as a part of general Culture and Intellectual History.

ARH 5795 METHODS OF ART HISTORY (4)
This course introduces students to various methods which art historians have used to analyze the form and content of
individual works of art, and to various modes of historical explanation. (Must be taken during the student's first two semesters.)

ARH 5797 GALLERY AND MUSEUM INTERNSHIP (2-6)
By working in Bay Area museums or galleries, students will become familiar with various museological operations. Internships vary owing to the work at hand in particular museums, but possible areas of work include registration, installation, conversation, writing of grants, or museum education. (Students are eligible after completing one semester in the program.) S/U only.

ART 2201C FABRICATIONS -FA
An introduction to basic visual art studio concepts. Topics include the nature of art, the visual language of its form, modes of representation, and visual art theory. Studio problems supplemented by lecture and discussion. Emphasis on images of implied time and space.

ART 2301C DRAWING I
PR: ART 2201C and ARH 3001. Intermediate projects exploring the methods, media, and concepts of drawing.

ART 2330 SELECTED TOPICS IN ART (2-4)
The content of this course will be determined by student demand and instructor interest. May be repeated with different topics. (Open University offerings under this number may not be counted for degree credit for art majors.)

ART 3110C CERAMICS I
PR: ARH 3001 and ART 2203C. Intermediate problems in ceramics and emphasis on the exploration of methods and media and the development of individual concepts.

ART 3222 INTRODUCTION TO COMPUTER IMAGES (4)
PR: ARH 3001, ART 2201C, and ART 2203C. An introductory exploration of the issues and practices involved in the creation of experimental computer art. The course focuses on an interdisciplinary approach to electronic media. Available to majors and non-majors.

ART 3420C LITHOGRAPHY I
PR: ARH 3001, ART 2201C, and ART 3301C. Intermediate projects in lithography with emphasis on the exploration of methods and media and development of individual concepts.

ART 3468 MULTI-MEDIA PRINTMAKING
PR: ARH 3001, ART 2201C, ART 3301C. Investigation of Printmaking Media including: monoprinting, collograph, relief printing and the dimensional print with emphasis on the development of individual concepts.

ART 3469 PHOTO-PRINTMAKING
PR: ARH 3001, ART 2201C, ART 3301C. Investigation of Photo-Printmaking and Darkroom Techniques including: Photo Etching, Photo Screen Printing, Photo Woodcut, and Photogravure with emphasis on development of individual concepts.

ART 3470C INTAGLIO I
PR: ARH 3001, ART 2201C, ART 3301C. Introduction to Art and Drawing I. Intermediate projects in intaglio with emphasis on the exploration of methods and media and the development of individual concepts.

ART 3510C PAINTING I
PR: ARH 3001, ART 2201C, ART 3301C. Intermediate projects in painting with emphasis on the exploration of methods and media and the development of individual concepts.

ART 3701C SCULPTURE I
PR: ART 2203C and ART 3001. Intermediate projects in sculpture with emphasis on contemporary theory and issues, the development of individual concepts and the exploration of materials, tools and processes.

ART 3935 STUDIO TECHNIQUES: SELECTED PROJECTS (2)
PR: ARH 3001, ART 2201C, ART 2203C, and CI. Concentration in specialized technical data and process. May be repeated for credit for different topics only.

ART 4111C CERAMICS II
PR: ART 3110C. Continued problems in ceramics. May be repeated.

ART 4223 ADVANCED COMPUTER IMAGES
PR: ART 3222 or CI. Advanced exploration of issues and practices involved in the creation of experimental computer art. The course continues as interdisciplinary approach to electronic media with a focus on individual and group projects.

ART 4224 COMPUTER ANIMATION
PR: ART 4223. Exploration of issues and practices involved in the creation of computer animations, focused on individual creative growth.

ART 4320C DRAWING II
PR: ART 3301C. Continued projects in drawing. May be repeated.

ART 4421C LITHOGRAPHY II
PR: ART 3420C. Continued projects in lithography. May be repeated.

ART 4471C INTAGLIO II
PR: ART 3470C. Continued projects in intaglio. May be repeated.

ART 4520C PAINTING II
PR: ART 3510C. Continued projects in painting. May be repeated.

ART 4702C SCULPTURE II
PR: ART 3701C. Continued problems in sculpture. May be repeated.

ART 4703 SCULPTURE III
PR: ART 4702C or ART 4111C. Study of current 3-D issues in art with advanced self directed project to explore the development of a personal vocabulary in 3-D media.

ART 4905 DIRECTED STUDY
PR: CC. Independent studies in the various areas of Visual Arts. Course of study and credits must be assigned prior to registration. May be repeated.

ART 4930 SELECTED TOPICS IN ART (2-4)
The content of this course will be determined by student demand and instructor interest. May be repeated with different topics. (Open University offerings under this number may not be counted for degree credit for art majors.)

ART 4935 ART SENIOR SEMINAR
PR: Senior Status. To aid majors to understand, appraise, and perfect their own art and technique through critical and aesthetic judgments of their colleagues. Discussion and critical evaluation.

Admission to all 5000-level studio courses by Consent of Instructor.

ART 5125C CERAMICS
PR: ART 4111C. Advanced projects in the various ceramic techniques, including throwing and glaze calculation. May be repeated.

ART 5340C DRAWING
PR: ART 4320C. Advanced projects in various drawing techniques. Emphasis on individual creative expression. May be repeated.

ART 5422C LITHOGRAPHY
PR: ART 4421C. Advanced projects in various lithographic techniques. Emphasis on individual creative expression. May be repeated.

ART 5472C INTAGLIO
PR: ART 4471C. Investigations into more complex intaglio processes including photoengraving and color printing procedures. Emphasis on personal conceptual development in graphic media. May be repeated.

ART 5530C PAINTING
PR: ART 4520C. Advanced projects in the various painting techniques. Emphasis on individual creative expression. May be repeated.

ART 5730C SCULPTURE
PR: ART 4702C. Advanced problems in the various techniques of sculpture. Emphasis on individual creative expression. May be repeated.
ART 5910 RESEARCH (1-4)
PR: CC. May be repeated.

ART 5936 STUDIO TECHNIQUES: SELECTED PROJECTS (2)
PR: ARH 3001, ART 2201C, ART 2203C, the topic/technique selected 3000-4000 level studio sequence and CI. Concentration in specialized media or processes. May be repeated for credit for different topics only.

FIL 2001 FILM: THE LANGUAGE OF VISION -6A -FA (4)
Open to both majors and non-majors. Exploration of the history of creative filmmaking from its beginnings to the present time. May not be repeated.

FIL 3200C FILM (4)
PR: ARH 3001 and ART 2201C. Intermediate problems in film with emphasis on the exploration of materials and media and the development of individual concepts.

FIL 3510 WORLD CINEMA -6A -FA (4)
Offers international perspectives through an examination of films from around the world. Each week narrative films from acclaimed directors will be screened, read about and discussed.

FIL 4201C FILM II (4)
PR: FIL 3200C. More advanced projects in filmmaking for further development works both technically and conceptually.

FIL 5205C CINEMATOGRAPHY (4)
PR: PGY 4520C. Advanced studio work using black and white, color and sound as technical and aesthetic factors in visual, artistic productions. May be repeated.

PGY 3401C PHOTOGRAPHY I (4)
PR: ART 2201C. Introduction to the expressive possibilities of photographic media. Projects and assignments will introduce students to both traditional and experimental ways of working with light-sensitive materials with an emphasis on the interdependence of form, technique, and concept. The course will also provide an overview of significant trends and directions in contemporary art photography.

PGY 4401C PHOTOGRAPHY II (4)
PR: PGY 3401C. Continued problems in photography. May be repeated.

DANCE

DAA 2000 THEATRE DANCE STYLES (2)
PR: DAA 2100 or DAA 2200 or CI. Development of technical skills in social and historical dance forms frequently stylized for use by dance choreographers. Forms to be studied will include polka, clogging, waltz, folk, tap dancing, etc. May be repeated up to 4 credit hours.

DAA 2100 FUNDAMENTALS OF MODERN DANCE I (2)
To acquaint beginning modern students with fundamentals of dance vocabulary, movement, rhythm and alignment. May be repeated.

DAA 2104 MODERN DANCE II (3)
PR: Admission by audition. Study of principles of modern dance technique. Practical work in exercises and movement phrases, utilizing changing rhythms and dynamics. Concert and performance attendance required. May be repeated.

DAA 2200 FUNDAMENTALS OF BALLET I (2)
To acquaint beginning ballet students with fundamentals of vocabulary, movement, rhythm and alignment. May be repeated.

DAA 2204 BALLET II (3)
PR: Admission by placement audition. Positions and barre exercises. Emphasis on correct alignment of the body and the application of simple step combinations in centre work. The use of ballet vocabulary (French terms). Material is covered almost totally as practical work in class with a few outside preparations for concert and performance attendance required. May be repeated.

DAA 2500 FUNDAMENTALS OF JAZZ DANCE (2)
A basic movement course in Jazz Dance involving dance vocabulary, alignment, styles and simple rhythmic movement patterns. May be repeated up to 4 credit hours.

DAA 2704 DANCE IMPROVISATION (2)
For majors and non-majors. Exploring various methods of spontaneously creating dance movement in individual and group situations. Structured and unstructured approaches will be explored. May be repeated up.

DAA 3105 MODERN DANCE III (3-4)
PR: Admission by placement audition. Continuation of DAA 2104. Further emphasis on style and phrasing. Work on projects requiring mood and quality of style and style reiteration in more advanced choreography, leading to performance. May be repeated.

DAA 3205 BALLET III (3-4)
PR: Admission by placement audition. Continuation of DAA 2204. Intensification of barre exercises for the development of strength and form. Exploration of phrasing and movement. Material covered as practical work in class for concerts and performances. May be repeated.

DAA 3220 BALLET VARIATIONS (1)
PR: DAA 3202. This course provides instruction in various forms of ballet. Semester courses include: Pointe technique, Men’s Class, Character Dance, Spanish Dance and Partnering. Ballet majors are required to complete two semester hours. May be repeated.

DAA 3400 REPERTORY (1)
P.R. Admission by audition or C.C. The development and performance of solo and/or group dances. Open to all University students by audition. May be repeated.

DAA 3480 PERFORMANCE (1)
PR: Admission by audition or C.C. Open to all university students proficient in dance techniques and concurrently enrolled in technique. Rehearsal and performance of works presented by the department. May be repeated up to 10 credit hours.

DAA 3502 JAZZ DANCE (2)
PR: Admission by placement audition, DAA 2204 or 2104. A technique class for the intermediate level dancer to become acquainted with the dance styles and forms of musical theatre and concert jazz dance. Emphasis is on highly stylized movement on a strong rhythmic base. May be repeated.

DAA 3503 JAZZ THEATRE DANCE (3)
PR: Admission by placement audition and DAA 3502. Continuation of DAA 3502. Further emphasis on projection, phrasing, rhythmic patterns and dynamics. Solo and ensemble studies leading to performance. May be repeated.

DAA 3700 CHOREOGRAPHY I (2)
Study and execution of basic principles of composition. Preparation of studies in theme and variations, breath phrases and metric phrases. May be repeated.

DAA 3701 CHOREOGRAPHY II (2)
PR: DAA 3700 or CI. Preparation of studies in rhythm, dynamics, form and motivation. May be repeated.

DAA 3800 SPECIALIZED STUDY IN MOVEMENT THEORY AND BODY ALIGNMENT (2)
Analysis of scientific basis of movement for the dancer through the study of body alignment and movement theories related to dance techniques.

DAA 4106 MODERN DANCE IV (4)
PR: Admission by placement audition or CI. Intensive work on the growth of personal performance styles. Equal emphasis will be given to training the body in the development of technical excellence. May be repeated.

DAA 4206 BALLET IV (4)
PR: Admission by placement audition or CI. Perfecting the execution of barre work. Intensification of centre work. More stress on aesthetic quality of movement and phrasing. Students expected to be proficient in pointe work. Outside projects, concerts, and performances are required. May be repeated.

DAA 4702 CHOREOGRAPHY III (2)
PR: DAA 3701 or CI. Work directed toward duets and group dances. The students will submit choreographic ideas for instructor’s approval, then proceed with rehearsals. Lab. reading. Rehearsal hours to be arranged. May be repeated.

DAA 4703 CHOREOGRAPHY IV (2)
PR: DAA 4702. The student will prepare studies based on
free form, minimal art, and chance methods. Lec-lab., reading. May be repeated.

DAN 4790 SENIOR PROJECT (1-5) PR: senior Major, CI, CC. The creation of an original group work and solo within the senior's major concentration-ballet or modern. To be performed and presented with the concurrence of a faculty advisor.

DAA 4920 DANCE STUDIES (1-4) PR: CI and CC. Dance Major status. Individual study to extend repertoire in technique and performance of Dance through participation in special workshops. May be repeated up to 4 credit hours.

DAE 4300 DANCE PEDAGOGY: THEORY AND PRACTICE (3) PR: CI, CC. Designed to provide prospective dance teachers with opportunities to develop concepts of pedagogy based on principles of teaching-learning in dance techniques and choreography. For majors and non-majors. May be repeated up to 9 credit hours.

DAN 2100 INTRODUCTION TO DANCE -6A (3) For majors and non-dance majors, a study of the art and language of dance through lectures, discussions, concert attendance, and studio practice. Designed to develop awareness and insight of this art form through discussion, observation, writing (70%), and movement experience (30%).

DAN 2610 MUSIC FOR DANCE I (2) Development of practical music skills in relation to dance. Emphasis on rhythm and the relationship of music forms to dance. May be repeated up to 4 credit hours.

DAN 2611 MUSIC FOR DANCE II (2) PR: DAN 2610 or CI. Elements within historical context. Continued problems in rhythmic materials.

DAN 3590 PRACTICUM IN DANCE PRODUCTION I (1-2) A practicum in mounting dance concerts with shop work and backstage participation. Intended for students working in costuming, set preparation, light presentation, stage management and production crew. Dance majors must have at least 2 credits for graduation accumulated in two different semesters. 40 hour lab required.

DAN 4111 SURVEY HISTORY OF DANCE -6A (3) Survey history of dance. Study of development of dance from its inception through 18th Century. Social and theatrical dance forms, Ethnic Dance included. Reading, lecture, and visual aids.


DAN 4170 DANCE SENIOR SEMINAR (2) PR: Senior major status. A study of career opportunities in performance, teaching, research, design, and choreography. To aid majors in self-appraisal as artists and develop methods to further their potential in the professional world. Discussion, critical evaluation and projects.

DAN 4905 DIRECTED READING (2) PR: CI and CC. Readings in topic of special interest to the student. Selection of topic and materials must be agreed upon and appropriate credit must be assigned prior to registration. A contract with all necessary signatures is required for registration. May be repeated for credit for different topics only.

DAN 4906 DIRECTED STUDY (1-5) PR: CI, CC. Independent studies in the various areas of Dance. Course of study may be used to fulfill Junior Project. Must receive approval prior to registration.

DAN 4930 SELECTED TOPICS IN DANCE (1-5) PR: CI and CC. The content of the course will be governed by student demand and instructor interest. May be repeated for credit for different topics only.

FINE ARTS INTERDISCIPLINARY

IDS 3362 ARTS CONNECTION -FA (3) This is an introductory course to the arts disciplines of music, dance, theatre and art. Artists from the four disciplines will provide weekly presentations centered around issues and ideas that have formed the basis of their creative research. Involveds of diversity, new technologies and community and public arts will be explored. This course will introduce students to the role the arts play in shaping their perceptions of the world as well as reflecting the underlying values and paradigms that form our culture(s).

IDS 3863 CRITICAL ISSUES AFFECTING THE ARTS -6A -XMW(3) PR: JR Standing or CI. A discussion based on examination of cultural trends, educational policies, governmental regulations, and financial factors which impact Art, Dance, Music, and Theatre. S/U option.

MUSIC

MUC 2221 COMPOSITION (3) PR: MUT 1112 and CI. Private instruction in original composition. Required of composition majors. May be repeated for three semesters.

MUC 2301 INTRODUCTION TO ELECTRONIC MUSIC (3) History and repertory of electronic music; standard sound studio techniques; basic electronics as applied in electronic sound synthesis; mathematics for music; composition and electronic music.

MUC 3231 COMPOSITION (3) PR: Necessary competency at MUC 2221 level determined by faculty jury. Private instruction in original composition. Required of composition majors. May be repeated for three semesters.

MUC 3401, 3402 ELECTRONIC MUSIC-ANALOG SYNTHESIS(3,3) PR: MUC 2301 and CI. Composition for tape medium with analog synthesizers; use of sound recording studio; repertoire or analog music synthesis; technical basis of analog systems design and construction.

MUC 3441, 3442 ELECTRONIC MUSIC-DIGITAL SYNTHESIS (3,3) PR: MUC 3401 or 3402 and CI. Computer assisted composition for conventional instruments; composition for tape medium with computer controlled analog synthesizers; direct digital synthesis; digital systems design and construction.

MUC 4421 COMPOSITION (3) PR: Necessary competency at MUC 3231 level determined by faculty jury. Private instruction in original composition. Required of composition majors. Must be repeated for credit for a minimum of 8 hours for majors.

MUC 4403, 4404 ELECTRONIC MUSIC-REAL-TIME PERFORMANCE (3,3) PR: MUC 3402 and MUC 3442 or equivalent. Composition for analog/digital equipment, performance applications; sound synthesis, interfacing electronics with conventional instruments.

MUC 4501 SEMINAR IN NEW MUSICAL SYSTEMS (3) PR: CI. Experimental sound sources and ensemble groupings; creation of new instruments; unfamiliar sonic materials and unique social contexts for music. May be repeated for credit.

MUC 4620, JAZZ COMPOSITION PR: MUC 3354 and/or CI. Private instruction in original jazz composition. Required of All Jazz Studies Comp. majors. Must be repeated for credit for a minimum of 6 hours for majors.

MUG 3101 BASIC CONDUCTING (2) PR: CI. The study and practical application of basic conducting techniques. Development of skills related to the conducting of musical scores.

MUG 4302 INSTRUMENTAL CONDUCTING (2) PR: MUG 3101 & CI. A study of those techniques of conducting unique to instrumental music ensembles: baton technique, score reading, terminology, rehearsal management.

MUG 2919 HISTORY OF POPULAR MUSIC (2) Popular music in the U.S. from 1820 to present. Units on the big band era, country and western, jazz, Black music, and the rock scene beginning in 1955.
MUH 2051 FOLK AND TRADITIONAL MUSIC OF WORLD CULTURES (3) - FA - AF
A comparative survey of the stylistic traits and functions of the folk and traditional music, both sacred and secular, of diverse Western and non-Western cultures. For non-majors: may be taken by majors as an elective with departmental approval.

MUH 2632 MUSIC IN THE UNITED STATES - FA (3)
Designed for majors and non-majors, this course will use live performances, videotapes, and recordings to illustrate music as practiced in America from Colonial to present times. Included in the course will be study of the contributions of various ethnic/minority groups, and discussions of the relevant social issues connected with these contributions.

MUH 3016 SURVEY OF JAZZ - FA (2)
An in-depth study of the historical study of jazz, including the representative music, literature, and sociological implications.

MUH 3300 MUSIC HISTORY/MEDEIVAL AND RENAISSANCE (2)
PR: Cl. Required of music majors; a study of the historical development of musical styles of the Medieval and Renaissance periods and of the music of those periods.

MUH 3301 MUSIC HISTORY/BAROQUE AND CLASSIC - XMW (3)
PR: MUL 2111 or Cl. A study of the historical development of musical styles of the Baroque and Classic periods and of the music of those periods. Required of music majors; open to non-majors with Cl.

MUH 3302 MUSIC HISTORY/ROMANTIC AND 20TH CENTURY - XMW (3)
PR: MUL 2111 or Cl. A study of the historical development of musical styles of the Romantic and Twentieth Century eras and of the music of those periods. Required of music majors; open to non-majors with Cl.

MUH 4350 INTERCULTURAL MUSIC IN THE TWENTIETH CENTURY - XMW (3)
PR: MUH 2051 or MUL 2111 or Cl. An in-depth investigation of composers born after c. 1880, from all parts of the world, who have attempted to integrate elements from two or more cultures into their compositions.

MUH 4801 HISTORY OF JAZZ (3)
PR: MUT 1112 or Cl. An in-depth study of the historical development of Jazz, including the representative musical literature and sociological implications.

MUL 2011, 3012 THE ENJOYMENT OF MUSIC - FA (3,3)
Open only to non-music majors; a study in the art of music and its materials, designed to develop an understanding of basic principles of music and a technique for listening to music.

MUL 2111 INTRODUCTION TO MUSIC LITERATURE - 6A - HP - FA (3)
PR: MUT 1112 or Cl. A survey of representative music exemplars of the past and present with emphasis on the study of styles and form. Required for music majors.

MUL 3001 ISSUES IN MUSIC - FA - AF (2-3)
Open only to non-music majors; lectures and live performances by artist faculty of significant works from the literature for the piano; analysis and illustration in performance of the abstract and aesthetic elements in music which vitaliy concern the artist-performer. (S/U only)

MAJOR PERFORMING ENSEMBLES (below)
PR: Cl. Open to all university students with the necessary proficiency in their performing media, study and performance of music for large combinations of voices, string, woodwind, brass, or percussion instruments. May be repeated for credit.

MUH 3143 WIND ENSEMBLE (1)
MUN 3213 UNIVERSITY ORCHESTRA (1)
MUN 3313 UNIVERSITY SINGERS (1)
MUN 3383 UNIVERSITY-COMMUNITY CHORUS (1)
MUN 3453 PIANO ENSEMBLE (1)
MUN 3713 JAZZ ENSEMBLE (1)
MUN 3503 OPERA WORKSHOP (1)

CHAMBER MUSIC ENSEMBLES (below)
PR: Cl. Open to all university students with the necessary proficiency in their performance media; study and performance of music for small combinations of voices, string, woodwind, brass, or percussion instruments, and piano, may be repeated for credit.

MUN 3343 CHAMBER SINGERS (1)
MUN 3411 STRING QUARTET (1)
MUN 3433 MARIMBA ENSEMBLE (1)
MUN 3421 FLUTE CHOIR (1)
MUN 3424 WOODWIND QUINTET (1)
MUN 3431 BRASS QUINTET (1)
MUN 3432 HORN QUARTET (1)
MUN 3433 BRASS CHOIR (1)
MUN 3443 PERCUSSION ENSEMBLE (1)
MUN 3444 MARIMBA ENSEMBLE (1)
MUN 3473 COLLEGIUM MUSICUM (1)
MUN 3483 CLASSICAL GUITAR ENSEMBLE (1)
MUN 3714 JAZZ CHAMBER ENSEMBLE (1)

MUS 2010 RECITAL ATTENDANCE (0)
This course is required whenever a student registers for applied music. The requirement for the successful completion of the course is attendance at ten (10) department-approved recitals/concerts throughout the semester. (S/U Grading only).

MUS 3201 LANGUAGE DICTION FOR SINGERS (1)
Specialized study in Language Diction for Singers. Specific language varies, to be arranged at each course offering. May be repeated for a total of three different languages only. Required of voice performance majors.

MUS 4905 DIRECTED STUDY (1-4)
PR: CC. Independent studies in the various areas of music; course of study and credits must be assigned prior to registration; may be repeated.

MUS 4930 SELECTED TOPICS IN MUSIC PR: Cl and CC. The content of the course will be governed by student demand and instructor interest. May be repeated for credit for different topics only.

MUS 4931 SELECTED STUDIO TOPICS IN MUSIC PR: Cl. The content of the study will be governed by individual student demand and instructor interest with an emphasis on individual instruction.

MUS 4935 MUSIC SENIOR SEMINAR (1)
PR: Cl. To aid majors to understand, appraise and perfect their own art through critical and aesthetic judgments of their colleagues. (S/U only)

MUS 5905 DIRECTED STUDY (1-4)
PR: CC. Independent studies in the various areas of music; course of study and credits must be assigned prior to registration; may be repeated.

MUSIC WORKSHOP COURSES (below)
PR: Cl. Intensive study in the specialized areas indicated below; open to teachers, University students, and secondary students; credit available to qualified students.

MUS 5927 ORCHESTRA WORKSHOP (1-2)
MUS 5929 STRING WORKSHOP (1-2)
MUT 1001 RUDIMENTS OF MUSIC (2)
Open to non-music majors; development of skills in hearing and performing music and in basic notation. Will not count as degree credit for music majors.

MUT 1111, 1112 MUSIC THEORY (3,3)
PR: Cl. Required of music majors; development of skills in perceiving and writing music through the use of aural and visual analysis and examples from all historical periods of music literature.

MUT 1241, 1242 AURAL THEORY (1,1)
PR: Cl. Course designed to begin training in aural recognition and vocal realization of materials used in music composition. Includes rhythmic, melodic and harmonic dictation, and sight singing. To be taken concurrently with MUT 1111, 1112.

MUT 2116, 2117 MUSIC THEORY (3,3)
PR: MUT 1112. Required of music majors, continuation of MUT 1111 and 1112.
MUT 2246, 2247 ADVANCED AURAL THEORY (1,1)
PR: MUT 1242. Course designed to continue training in aural recognition and visualization of materials used in music composition. Includes rhythm, melodic and harmonic dictation, and sight singing. To be taken concurrently with MUT 2116, 2117.

MUT 3353 JAZZ COMPOSITION AND ARRANGING I (3)
PR: MUT 1112 and Cl. Course designed to develop arranging and/or compositional skills in the jazz idiom through the study of jazz orchestration, harmonic, and melodic practices.

MUT 3354 JAZZ COMPOSITION AND ARRANGING II (3)
PR: MUT 1112 and Cl. Course designed to develop arranging and/or compositional skills in the jazz idiom through the study of jazz orchestration, harmonic, and melodic practices.

MUT 3411 JAZZ THEOREY AND IMPROVISATION I (2)
PR: MUT 1112 and/or Cl. A study of jazz improvisational techniques and related jazz theory.

MUT 3642 JAZZ THEORY AND IMPROVISATION II (2)
PR: MUT 3641 or Cl. A study of jazz improvisational techniques and related jazz theory.

MUT 3663 JAZZ STYLES AND ANALYSIS I (2)
PR: Mut 3642 or Cl. A studio course study of the improvised solos of the major innovators in jazz. Oriented toward the continuing development of students' solosing ability. Students are required to enroll in Jazz Chamber Ensemble as a lab. Open to majors and non-majors.

MUT 3664 JAZZ STYLES AND ANALYSIS II (2)
PR: Jazz Styles and Analysis I or Cl. A continuation of Jazz Styles and Analysis I with the emphasis on contemporary jazz artists. Students are required to enroll in Jazz Chamber Ensemble as a lab. Open to majors and non-majors.

MUT 4411 SIXTEENTH CENTURY PRACTICE (3)
PR: MUT 2117. A study of the music of the 16th century from a theoretical standpoint; development of skills in perceiving and writing music in the style of the period through the use of aural and visual analysis.

MUT 4421 EIGHTEENTH CENTURY PRACTICE (3)
PR: MUT 2117. An intensive study of the contrapuntal practice of the 18th century; development of skills in perceiving and writing music in the style of the period through the use of aural and visual analysis.

MUT 4571 TWENTIETH CENTURY PRACTICE (3)
PR: MUT 2117. A study of 20th century theoretical concepts; development of skills in perceiving and writing music in contemporary styles through the use of aural and visual analysis.

MUT 5651 GRADUATE REVIEW OF MUSIC THEORY (2)
A graduate level review of basic theoretical concepts with emphasis on the common practice period. The course serves to satisfy deficiencies in music theory and does not count toward the graduate degree requirements.

SECONDARY APPLIED MUSIC COURSES (below)
PR: One half-hour private lesson or one hour class per week for music students wishing to gain proficiency in an area other than their applied performance major and for a limited number of nonmusic majors who have had prior musical training. Course is open by audition only.

MVV 1215 APPLIED TRUMPET (2)
MVV 1216 APPLIED CLASSICAL GUITAR (2)
MVV 1217 APPLIED FLUTE (2)
MVV 1218 APPLIED OBOE (2)
MVV 1219 APPLIED CLARINET (2)
MVV 1214 APPLIED PIANO (2)
MVV 1215 APPLIED SAXOPHONE (2)

APPLIED MUSIC COURSES PRINCIPAL (below)
PR: Cl. Required of all music education and composition majors; open to a limited number of non-music majors by audition only. Private and class instruction in string, woodwind, brass, and percussion instruments, voice and piano.

MVV 1311 TRUMPET PRINCIPAL (2)
MVV 1312 FRENCH HORN PRINCIPAL (2)
MVV 1313 TROMBONE PRINCIPAL (2)
MVV 1314 EUPHONIUM PRINCIPAL (2)
MVV 1315 TUBA PRINCIPAL (2)
MVV 1316 APPLIED JAZZ PRINCIPAL (2)
MVV 1317 JAZZ GUITAR PRINCIPAL (2)
MVV 1314 JAZZ BASS PRINCIPAL (2)
MVV 1319 APPLIED JAZZ PERCUSSION PRINCIPAL (2)
MVV 1311 PIANO PRINCIPAL (2)
MVV 1313 ORGAN PRINCIPAL (2)
MVV 1311 PERCUSSION PRINCIPAL (2)
MVV 1313 VIOLIN PRINCIPAL (2)
MVV 1313 VIOLONCELLO PRINCIPAL (2)
MVV 1313 VIOLA PRINCIPAL (2)
MVV 1314 DOUBLE BASS PRINCIPAL (2)
MVV 1315 HARP PRINCIPAL (2)
MVV 1316 CLASSICAL GUITAR PRINCIPAL (2)
MVV 1311 VOICE PRINCIPAL (2)
MVV 1311 FLUTE PRINCIPAL (2)
MVV 1312 OBOE PRINCIPAL (2)
MVV 1313 CLARINET PRINCIPAL (2)
MVV 1314 BASSOON PRINCIPAL (2)
MVV 1315 SAXOPHONE PRINCIPAL (2)

APPLIED MUSIC COURSES PRINCIPAL (below)
PR: Cl. Required of all music education and composition majors; open to a limited number of non-music majors by audition only. Private and class instruction in string, woodwind, brass, and percussion instruments, voice and piano.

MVV 2321 TRUMPET PRINCIPAL (2)
MVV 2322 FRENCH HORN PRINCIPAL (2)
MVV 2323 TROMBONE PRINCIPAL (2)
MVV 2324 EUPHONIUM PRINCIPAL (2)
MVV 2325 TUBA PRINCIPAL (2)
MVV 2329 APPLIED JAZZ PRINCIPAL (2)
MVV 2324 JAZZ GUITAR PRINCIPAL (2)
MVV 2324 JAZZ BASS PRINCIPAL (2)
MVV 2329 APPLIED JAZZ PERCUSSION PRINCIPAL (2)
MVV 2321 PIANO PRINCIPAL (2)
MVV 2323 ORGAN PRINCIPAL (2)
MVV 2321 PERCUSSION PRINCIPAL (2)
MVV 2321 VIOLIN PRINCIPAL (2)
MVV 2323 VIOLA PRINCIPAL (2)
MVV 2323 VIOLONCELLO PRINCIPAL (2)
MVV 2324 DOUBLE BASS PRINCIPAL (2)
MVV 2325 HARP PRINCIPAL (2)
MVV 2326 CLASSICAL GUITAR PRINCIPAL (2)
MVV 2321 VOICE PRINCIPAL (2)
MVB 2321 FLUTE PRINCIPAL (2)
MVB 2322 OBOE PRINCIPAL (2)
MVB 2323 CLARINET PRINCIPAL (2)
MVB 2324 BASSOON PRINCIPAL (2)
MVB 2325 SAXOPHONE PRINCIPAL (2)

APPLIED MUSIC COURSES PRINCIPAL (below)
PR: CI. Required of all music education and composition majors; open to a limited number of non-music majors by audition only. Private and class instruction in string, woodwind, brass, and percussion instruments, voice and piano. May be repeated for credit three semesters only. Applied music courses are NOT available on S/U basis.
MVB 3331 TRUMPET PRINCIPAL (2)
MVB 3332 FRENCH HORN PRINCIPAL (2)
MVB 3333 TROMBONE PRINCIPAL (2)
MVB 3334 EUPHONIUM PRINCIPAL (2)
MVB 3335 TUBA PRINCIPAL (2)
MVS 3330 APPLIED JAZZ PIANO PRINCIPAL (2)
MVS 3331 JAZZ GUITAR PRINCIPAL (2)
MVS 3334 JAZZ BASS PRINCIPAL (2)
MVS 3339 APPLIED JAZZ PERCUSSION PRINCIAPL (2)
MKV 3331 PIANO PRINCIPAL (2)
MKV 3333 ORGAN PRINCIPAL (2)
MVP 3331 PERCUSSION PRINCIPAL (2)
MVS 3331 VIOLIN PRINCIPAL (2)
MVS 3332 VIOLA PRINCIPAL (2)
MVS 3333 VIOLONCELLO PRINCIPAL (2)
MVS 3334 DOUBLE BASS PRINCIPAL (2)
MVS 3335 HARP PRINCIPAL (2)
MVS 3336 CLASSICAL GUITAR PRINCIPAL (2)
MVJ 3331 VOICE PRINCIPAL (2)
MVW 3331 FLUTE PRINCIPAL (2)
MVW 3332 OBOE PRINCIPAL (2)
MVW 3333 CLARINET PRINCIPAL (2)
MVW 3334 BASSOON PRINCIPAL (2)
MVW 3335 SAXOPHONE PRINCIPAL (2)

APPLIED MUSIC COURSES PRINCIPAL (below)
PR: CI. Required of all music education and composition majors; open to a limited number of non-music majors by audition only. Private and class instruction in string, woodwind, brass, and percussion instruments, voice and piano. May be repeated for credit three semesters only. Applied music courses are NOT available on S/U basis.
MVB 4341 TRUMPET PRINCIPAL (2)
MVB 4342 FRENCH HORN PRINCIPAL (2)
MVB 4343 TROMBONE PRINCIPAL (2)
MVB 4344 EUPHONIUM PRINCIPAL (2)
MVB 4345 TUBA PRINCIPAL (2)
MVJ 4340 JAZZ PIANO PRINCIPAL (2)
MVJ 4343 JAZZ GUITAR PRINCIPAL (2)
MVJ 4344 JAZZ BASS PRINCIPAL (2)
MVJ 4349 JAZZ PERCUSSION PRINCIPAL (2)
MKV 4341 PIANO PRINCIPAL (2)
MKV 4343 ORGAN PRINCIPAL (2)
MVP 4341 PERCUSSION PRINCIPAL (2)
MVS 4341 VIOLIN PRINCIPAL (2)
MVS 4342 VIOLA PRINCIPAL (2)
MVS 4343 VIOLONCELLO PRINCIPAL (2)
MVS 4344 DOUBLE BASS PRINCIPAL (2)
MVS 4345 HARP PRINCIPAL (2)
MVS 4346 CLASSICAL GUITAR PRINCIPAL (2)
MVV 4341 VOICE PRINCIPAL (2)
MVW 4341 FLUTE PRINCIPAL (2)
MVW 4342 OBOE PRINCIPAL (2)
MVW 4343 CLARINET PRINCIPAL (2)
MVW 4344 BASSOON PRINCIPAL (2)
MVW 4345 SAXOPHONE PRINCIPAL (2)

APPLIED MUSIC COURSES (below)
PR: CI. Required of all applied music majors; open to a limited number of non-music majors by audition only. Private and class instruction in string, woodwind, brass and percussion instruments, voice and piano. May be repeated for credit.
MVB 1411 TRUMPET MAJOR (4)
MVB 1412 FRENCH HORN MAJOR (4)
MVB 1413 TROMBONE MAJOR (4)
MVB 1414 EUPHONIUM MAJOR (4)
MVB 1415 Tuba MAJOR (4)
MVJ 1410 APPLIED JAZZ PIANO MAJOR (4)
MVJ 1412 JAZZ GUITAR MAJOR (4)
MVJ 1414 JAZZ BASS MAJOR (4)
MVK 1411 PIANO MAJOR (4)
MVK 1413 ORGAN MAJOR (4)
MVJ 1411 PERCUSSION MAJOR (4)
MVS 1411 VIOLIN MAJOR (4)
MVS 1412 VIOLA MAJOR (4)
MVS 1413 CELLO MAJOR (4)
MVS 1414 DOUBLE BASS MAJOR (4)
MVS 1415 HARP MAJOR (4)
MVS 1416 CLASSICAL GUITAR MAJOR (4)
MVV 1411 VOICE MAJOR (4)
MVW 1411 FLUTE MAJOR (4)
MVW 1412 OBOE MAJOR (4)
MVW 1413 CLARINET MAJOR (4)
MVW 1414 BASSOON MAJOR (4)
MVW 1415 SAXOPHONE MAJOR (4)

APPLIED MUSIC COURSES (below)
PR: Necessary competency at sophomore level determined by faculty jury examination. Required of all applied music majors. Private and instruction in string, woodwind, brass, and percussion instruments, voice and piano. May be repeated for credit three semesters only.
MVB 2421 TRUMPET MAJOR (4)
MVB 2422 FRENCH HORN MAJOR (4)
MVB 2423 TROMBONE MAJOR (4)
MVB 2424 EUPHONIUM MAJOR (4)
MVB 2425 TUBA MAJOR (4)
MVJ 2420 APPLIED JAZZ PIANO MAJOR (4)
MVJ 2423 JAZZ GUITAR MAJOR (4)
MVJ 2424 JAZZ BASS MAJOR (4)
MVK 2421 PIANO MAJOR (4)
MVK 2423 ORGAN MAJOR (4)
MVP 2421 PERCUSSION MAJOR (4)
MVS 2421 VIOLIN MAJOR (4)
MVS 2422 VIOLA MAJOR (4)
MVS 2423 CELLO MAJOR (4)
MVS 2424 DOUBLE BASS MAJOR (4)
MVS 2425 HARP MAJOR (4)
MVS 2426 CLASSICAL GUITAR MAJOR (4)
MVV 2421 VOICE MAJOR (4)
MVW 2421 FLUTE MAJOR (4)
MVW 2422 OBOE MAJOR (4)
MVW 2423 CLARINET MAJOR (4)
MVW 2424 BASSOON MAJOR (4)
MVW 2425 SAXOPHONE MAJOR (4)

APPLIED MUSIC COURSES (below)
PR: Necessary competency at junior level determined by faculty jury examination. Required of all applied music majors. Private and instruction in string, woodwind, brass and percussion instruments, voice and piano. May be repeated for credit three semesters only.
MVB 2431 TRUMPET MAJOR (4)
MVB 2432 FRENCH HORN MAJOR (4)
MVB 2433 TROMBONE MAJOR (4)
MVB 2434 EUPHONIUM MAJOR (4)
MVB 2435 TUBA MAJOR (4)
MVJ 2430 APPLIED JAZZ PIANO MAJOR (4)
MVJ 2433 JAZZ GUITAR MAJOR (4)
MVJ 2434 JAZZ BASS MAJOR (4)
MVJ 2435 APPLIED JAZZ PERCUSSION (4)
MKV 2431 PIANO MAJOR (4)
MKV 2433 ORGAN MAJOR (4)
MVP 2431 PERCUSSION MAJOR (4)
MVS 2431 VIOLIN MAJOR (4)
MVS 2432 VIOLA MAJOR (4)
MVS 2433 CELLO MAJOR (4)
MVS 2434 DOUBLE BASS MAJOR (4)
MVS 2435 HARP MAJOR (4)
MVS 2436 CLASSICAL GUITAR MAJOR (4)
MVV 2431 VOICE MAJOR (4)
MVW 2431 FLUTE MAJOR (4)
MVW 2432 OBOE MAJOR (4)
MVW 2433 CLARINET MAJOR (4)
MVW 2434 BASSOON MAJOR (4)
MVW 2435 SAXOPHONE MAJOR (4)
MUSIC EDUCATION

MUE 2090 THEORETICAL BASES OF MUSIC EDUCATION (2)
The course is designed to investigate music education practices in the schools. Through the experience and information offered in this course a student will be able to determine his/her commitment to professional music education.

MUE 3421 CHORAL MATERIALS PRACTICUM (1)
PR: CI. A study of choral materials in a laboratory setting appropriate to elementary and secondary school music programs. Course content will change each semester. May be repeated for a total of 2 credit hours.

MUE 3422 BAND MATERIALS PRACTICUM (1)
PR: CI. A study of band materials in a laboratory setting appropriate to elementary and secondary school music programs. Course content will change each semester. May be repeated for a total of 2 credit hours.

MUE 3423 ORCHESTRA MATERIALS PRACTICUM (1)
PR: CI. A study of orchestra materials, in a laboratory setting, appropriate to elementary and secondary school music programs. Course content will change each semester. May be repeated for a total of 2 credit hours.

MUE 3450 BEGINNING WOODWIND TECHNIQUES (1)
PR: Sophomore standing, non-woodwind major. The course introduces the fundamentals of woodwind instrument pedagogy. In addition basic techniques of woodwind performance are taught through the study of clarinet and flute.

MUE 3451 ADVANCED WOODWIND TECHNIQUES (1)
PR: Sophomore standing, woodwind instrument major or MUE 3450. The course develops knowledge and skills dealing with advanced principles of teaching and performing on woodwind instruments.

MUE 3480 BEGINNING BRASS TECHNIQUES (1)
PR: Sophomore standing, non-brass major. The course introduces the fundamentals of brass wind instrument pedagogy. In addition, basic techniques of brass performance are taught through the study of trombone and trumpet.

MUE 3481 ADVANCED BRASS TECHNIQUES (1)
PR: Sophomore standing, brass instrument major or MUE 3480. The course develops knowledge and skills dealing with advanced principles of teaching and performing on all brass instruments.

MUE 4210 MUSIC FOR THE CHILD (3)
PR: Admission to the College of Education. Music fundamentals, the development of music skills and knowledge of music materials and teaching strategies for presenting music to children in the elementary school.

MUE 4311 MUSIC IN THE ELEMENTARY SCHOOL (3)
PR: CI. A study of principles, techniques, materials, and activities as they relate to a comprehensive music curriculum in Grades K-6.

MUE 4321 FOUNDATIONS OF CHORAL MUSIC (2)
This course deals with the development of knowledge and skills needed to effectively organize and teach a choral music program for elementary and intermediate grade level students. Include school observation and participation component. Major status or instructor permission required.

MUE 4330 CLASSROOM MUSIC IN THE SECONDARY SCHOOL (3)
PR: CI. Development and implementation of methods and techniques for teaching music to the student not participating in secondary school music performing groups.

MUE 4331 CHORAL METHODS IN THE SECONDARY SCHOOL (3)

MUE 4332 INSTRUMENTAL MUSIC IN THE SECONDARY SCHOOL (3)

MUE 4352 FOUNDATIONS OF INSTRUMENTAL MUSIC (2)
PR: CI. MUE 3450, MUE 3460, MVP 1211. Junior standing. Introduction to the foundation of instrumental music instruction in the elementary and middle school.
### THEATRE

#### THE 2020 THEATRE FUNDAMENTALS
(2)
An introduction to the art of theatre as part of the large context of performing arts. The approach will be both chronological and multi-cultural. This course open to non-majors and theatre majors should take this course concurrently with their first registration in the group of courses TPA 2200, TPA 2223, TPA 2232, TPP 2110. Required of all theatre majors.

#### THE 3090C MODERN THEATRE PRACTICE -6A
4
Initial readings and exercises in theatre: play analysis, performance, and technical theatre for non-theatre majors.

#### THE 3100 THEATRE HISTORY -XMW
4
PR: THE 2020. The study of theatrical production in its cultural context, including theatre architecture, scenography, acting and directing. Normally fifteen plays will be read. Required of all theatre majors. Open to non-majors.

#### THE 3925 PRODUCTION INVOLVEMENT
1
The rehearsal, construction, and performance of major theatrical works. Assignments are made by a faculty committee following the student's completion of a PI request form, available in the Theatre Office, and enrollment in this course. May be repeated. Open to non-majors with CI.

#### THE 4180 THEATRE ORIGINS -6A -XMW
4
PR: THE 3100 and one of the following: THE 4320, THE 4330, THE 4360, THE 4401, THE 4442, THE 4480. An analysis of the development of theatre out of myth, ritual, and literature. Emphasis placed on how attempts to understand the resulting phenomena (e.g. Aristotle's *Poetics*) can teach us about the nature of our art. Either THE 4180 or THE 4562 is required of all theatre majors. Open to senior non-majors with CI.

#### THE 4284 HISTORY OF COSTUME
3
A survey of clothing and dress from Ancient Egypt to the 20th Century with an emphasis on cultural and social influences. (A requirement in the design track/costume.) Open to upper level non-majors with CI.

#### THE 4286 ARCHITECTURE AND DECOR
3
A survey of architecture and furniture from ancient Egypt to the 20th Century. (A requirement in the design track/scenic.) Open to upper level non-majors with CI.

#### THE 4320 THE THEATRE OF MYTH AND RITUAL/NORTHERN EUROPEAN (950-1600) AND ORIENTAL (400-1200) -6A
3
PR: THE 3100. An investigation into the interrelationship of myth, ritual, and theatre. Considers northern European liturgical and secular plays as compared with Hindu, Chinese, and Japanese drama. Open to upper level non-majors with CI.

#### THE 4330 SHAKESPEARE FOR THE THEATRE -6A -XMW -XLW
3
PR: THE 3100. A close study of selected plays with special emphasis on their performance values. Open to upper level non-majors with CI.

#### THE 4360 THE 19TH CENTURY THEATRE REVOLUTION -6A -XLW
3
PR: THE 3100. Survey of the European art theatre revolution against the romantic realism of the commercial stage and its effects on subsequent theatre activity. Open to upper level non-majors with CI.

#### THE 4401 O'NEILL AND AFTER -6A -XMW
3
PR: THE 3100. A course in the function of the script for the theatre artist treating materials in the American Theatre from 1915 to 1964. Open to upper-level non-majors with CI.

#### THE 4436 THEATRE OF PARISIALISM -6A -XMW
3
PR: THE 3100. The practice of theatre as it reflects cultural heritage, gender, race, and sexual orientation. Study of contemporary scripts, critical and artistic statements. Open to upper level non-majors with CI.

#### THE 4442 THE COMEDY OF THE CLASSIC AND NEO-CLASSIC STAGE -6A -XMW
3
PR: THE 3100. A study of comedic function in scripts from Greek and Roman, Restoration and French Neoclassic of the late 17th century and other plays from the late 18th and late 19th centuries which reflect similar characteristics. Open to upper level non-majors with CI.

#### THE 4480 DRAma-SPECIAL TOPICS
3
PR: THE 3100. A study of a significant playwright or grouping of playwrights, e.g. Moliere, Brecht, recent American drama-tists. Open to upper level non-majors with CI.

#### THE 4562 CONTEMPORARY PERFORMANCE THEORY -6A -XMW
3

#### THE 4593 HONORS SEMINAR
2
Readings in the literature, history and theory of the stage in preparation for Theatre Honors Practicum. Past topics have included New German Theatre, Popular Theatre, American Theatre, Jacobean Theatre. Enrollment limited to upper level majors who have been formally admitted to the department honors program. Not available S/U. May not be repeated except under special and unusual circumstances.

#### THE 4594 HONORS PRACTICUM
3
PR: THE 4593. Honors Practicum grows out of the Honors Seminar and engages students in workshops or production with guest artists. Past artists have included the Free Theatre of Munich, the San Francisco Mime Troupe, playwright Eric Overmyer, Jeff Jones and Gary Hill. May not be repeated except under special and unusual circumstances.

#### THE 4595 HONORS THESIS
1-3
PR: THE 4594. A practical or written thesis related to the seminar and practicum and approved by the departmental honors committee.

#### THE 4905 DIRECTED STUDIES
1-4
Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.

#### THE 4927 ADVANCED PRODUCTION INVOLVEMENT
1
PR: THE 3925 or CI. The rehearsal, construction, and performance of major theatrical works. Assignments are made by a faculty committee following the student's completion of a PI request form, available in the Theatre Office, and enrollment in this course. May be repeated. Open to non-majors with CI.

#### THE 4936 SELECTED TOPICS IN THEATRE
1-8
PR: CI. The content of the course will be governed by student demand and instructor interest. May be lecture or class discussion or studio format. May be repeated for credit for different topics only.

#### THE 5908 DIRECTED STUDIES
1-6
PR: CI and CC. Independent studies in the various areas of Theatre. Course of study and credits must be assigned prior to registration.

#### THE 5931 SELECTED TOPICS IN THEATRE
1-8
PR: CI. The content of the course will be governed by the student demand and instructor interest. May be lecture or
class discussion or studio format. May be repeated for credit for different topics only.

TPA 2200 THEATRE CRAFTS: STAGECRAFT (3) 
Required of all theatre majors. The basic materials, equipment, and skills used in scenic construction and painting for theatrical productions. An introductory course with lab. Open to non-majors.

TPA 2223 THEATRE CRAFTS: LIGHTING (3) 
Required of all design majors. This course or TPA 2232 is required of all theatre majors. The basic equipment and skills used in lighting stage productions. An introductory course with lab. Open to non-majors.

TPA 2232 THEATRE CRAFTS: COSTUME (3) 
Required of all design majors. This course or TPA 2223 is required of all theatre majors. Open to non-majors. The basic materials, equipment, and skills used in costume construction for the stage. An introductory course with lab.

TPA 3004 MEANS OF VISUAL EXPRESSION (3) 
PR: Completion of the four required 2000 level courses. The study of presentational techniques for visual design and technology as applied to the development of visual dynamics, required of all theatre majors. Open to non-majors with TPA 2200 and CI.

TPA 3221 LIGHTING: THEORY AND PRACTICE (3) 
PR: TPA 2223 and TPA 3004. Intermediate lighting design course concerned with graphic presentations, color theory, design concepts, and practical experience with computer lighting systems. A requirement in the design track/lighting. Open to upper level non-majors with TPA 2223 and CI.

TPA 3248 WORKSHOP IN STAGE MAKEUP (1) 
Beginning theory and practice in make-up for the stage. Open to non-majors. Theatre majors given preference. A studio course.

TPA 3250 SOUND FOR THE STAGE (3) 
PR: TPA 2223. Basic study of audio components, fundamental properties of sound, multiple channel recording, editing, reproduction and reinforcement. Methods and techniques used in theatre to create sound effects. Open to non-majors with CI.

TPA 3801 STAGE MANAGEMENT (2) 
PR: TPA 2200, TPA 2223, or TPA 2232. A practical course in the working organizational function of the stage manager in theatre, dance, opera, and other live performance situations. Open to non-majors with CI.

TPA 3810 INTRODUCTION TO PUPPETRY (3) 
PR: Completion of the four required 2000 level courses. Principles and methods of puppetry with a historical survey of major forms and practical problems with laboratory production. Open to nonmajors with CI.

TPA 3840 PUPPETRY PERFORMANCE AND PRODUCTION (4) 
PR: TPA 3810. The creation, building, rehearsal, and performance of plays for puppet theatre. May be repeated one time for additional elective credit, with CI, to total of 8 hours. Open to non-majors with CI.

TPA 4020 LIGHT DESIGN (4) 
PR: ART 3301C, TPA 3221, TPA 4208 and portfolio review. The aesthetic and practical application of the elements of design in lighting for theatre presentation. A requirement in the design track/lighting.

TPA 4040 COSTUME DESIGN (4) 
PR: ART 3301C, THE 4264, TPA 2232 and portfolio review. The aesthetic and practical application of the elements of design in costume for theatre presentation. A requirement in the design track/costume.

TPA 4060 SCENE DESIGN (4) 
PR: TPA 4208, THE 4266, ART 3301C and portfolio review. The aesthetic and practical application of the elements of design in scenery for theatre presentation. A requirement in the design track/scenic.

TPA 4077 SCENE PAINTING (2) 
PR: TPA 3004. A practical course in the painting of stage scenery: media and application. Open to upper level non-majors with CI.

TPA 4208 STAGECRAFT AND DRAFTING (3) 
PR: TPA 3004. A practical course in drafting for the stage, scenic construction and application. A requirement in the design/scenic and lighting. Open to upper level non-majors with CI.

TPA 4231 COSTUME CONSTRUCTION (3) 
PR: TPA 2232 and TPA 3004. A practical course in the drafting of patterns for the construction of costumes and costume accessories will be treated. Included topics are millinery, footwear, jewelry, masks, armor, corsetry; both period and modern. Open to upper level non-majors with CI.

TPA 4273 STAGE PROPERTIES: TECHNIQUES AND MATERIALS STUDIO (2) 
PR: TPA 3004. Demonstration of and experience with materials used in construction of stage properties. Modeling of prototypes and basic casting techniques. Organization of shop. Open to upper level non-majors with CI.

TPP 2110 VOICE-BODY-IMPROVISATION (3) 
Exploring the elements basic to acting skills, a participation course. Required of all theatre majors. Open to non-majors.

TPP 3111 WORKSHOP FOR TEXT ANALYSIS (3) 
PR: Completion of the four required 2000 level theatre courses. An introduction to the analysis of distinct styles of plays, normally to include at least one contemporary realistic play and one classical play. Focus will be on the actor's or director's close reading of a script as a preparation for performance. Required of all theatre majors. Open to non-majors with TPP 2110 and CI.

TPP 3121 IMPROVISATION I (3) 
PR: Completion of the four required 2000 level courses. An intensive study in improvisation as an enhancement of the actor's skills. Exercises and theatre games as flexible forms which accommodate improvisation and physical invention are examined and used to develop group creativity. Open to non-majors with CI.

TPP 3235 THEATRE FOR SPECIAL AUDIENCES (3) 
PR: Completion of the four required 2000 level courses and/or CI. The preparation and performance of a production for a special audience (ethnic, children, aged, institutionalized, etc.) With CI, may be repeated one time as additional elective credit (total of 6 hours). Open to non-majors with CI.

TPP 3300 BODY DISCIPLINES (2) 
PR: Completion of four required 2000 level theatre courses. A laboratory course in various disciplines or systems in controlling and understanding the body's motive powers, with focus on their use in the stage performer. Required of all theatre majors with a performance concentration. May be repeated for credit. Open to upper level non-majors with CI.

TPP 3380 SPECIAL SKILLS IN MOVEMENT (2) 
PR: TPP 3300. Stage combat, circus and acrobatic techniques, and other special techniques of movement. May be repeated for credit. Open to upper level non-majors with CI.

TPP 3790 VOICE PREPARATION FOR THE ACTOR (2) 
PR: Completion of the four required 2000 level theatre courses. A laboratory in voice production and corrective speech for the actor. Required of all theatre majors with a performance concentration. May be repeated for credit. Open to upper level non-majors with CI.

TPP 4110 STAGE PROPERTIES TECHNIQUES AND MATERIALS STUDIO (2) 
PR: TPA 3004. Demonstration of and experience with materials used in construction of stage properties. Modeling of prototypes and basic casting techniques. Organization of shop. Required of all theatre majors with a performance concentration.

TPP 4150 INTERMEDIATE SCENE STUDY I (3) 
PR: TPP 4150 Intermediate scene study. Required of all theatre majors with a performance concentration.
TPP 4180 ADVANCED SCENE STUDY  
PR: TPP 4140 and audition. The aesthetics of acting. The various theories of art. A studio course. Required of all theatre majors with a performance concentration.

TPP 4220 AUDITION WORKSHOP FOR THE ACTOR  
PR: TPP 4150 or TPP 4230. Preparation for professional audition; discussion of professional objectives. Open to upper level non-majors with Cl.

TPP 4230 LABORATORY WORKSHOP IN PERFORMANCE  
PR: TPP 3111 and audition. Special workshop in advanced techniques based upon individual problems and needs. May be repeated twice (for a total of 9 hours credit). Open to upper level non-majors with Cl.

TPP 4250 MUSIC THEATRE WORKSHOP  
PR: TPP 3111. Special problems in acting as applied to the musical theatre with emphasis on singing and dance. Open to upper level non-majors with Cl.

TPP 4310, 4311 DIRECTING I, II  
PR: TPP 4150 or TPP 4230. An elective sequence in directing. A workshop course in which the student first encounters the basic tasks of the director by preparing and directing one or two scenes and then progresses to more complex scene work in a variety of styles and finally proceeds to the short play or theatre pieces.

TPP 4600 WRITING FOR THE THEATRE I  
PR: THE 3100, TPA 3004, and TPP 3111. An elective sequence in writing, in which the student first encounters the problems unique to dramatic language and situation, then progresses to complexities of character, plot, and stage dynamics. Normally the aim would be to complete several performance-worthy self-contained scenes. May be repeated for credit. Open to upper level non-majors with Cl.

TPP 4920 SENIOR WORKSHOP FOR ACTORS  
PR: TPP 4152, TPP 3500, TPP 3790. A workshop in advanced vocal and movement techniques. Required for all theatre majors with a performance concentration.
NUR 3284C GERONTOLOGICAL NURSING (2)
PR: NUR 3113, 3114, 3114L, 3064C. Nursing Majors. Focuses on theories of aging and human development; assessment of functional health patterns; and planning health promotion and disease prevention activities with older adults. Critical thinking is used to analyze the effects of interventions on individuals and groups.

NUR 3285 ETHICAL AND LEGAL ASPECTS IN NURSING AND HEALTH CARE (2)
PR: NUR 3113 or Cl. Nursing Majors. Introduction to contemporary bioethical and legal issues confronting health care providers in a variety of settings. Focuses on identification of legal and ethical principles underlying the decision-making process in nursing and health care.

NUR 4040 TRANSCULTURAL NURSING (2)
Open to both students and caregivers in health-related fields. Designed to assist students to become aware of own values as related to various cultural groups and to identify health practices and beliefs of these groups, health resources available and adaptive measures by caregivers to meet their needs.

NUR 4041 CULTURE IN NURSING PRACTICE (2)
PR: NUR 3113 or Cl. Nursing Majors. Introduces knowledge and skills needed to give culturally congruent nursing care to people from diverse cultural groups. Compares and analyzes health-related practices, values, beliefs among major cultural groups.

NUR 4165 NURSING INQUIRY (2)
PR: NUR 3113, Nursing Majors or Cl. An exploration of the research process. Emphasis on identification of researchable nursing problems and evaluation of research that is applicable to nursing practice.

NUR 4216 ADULT HEALTH II (3)
PR: NUR 3829, 3145, 3215, 3215L, 3284C. Concurrent with NUR 4216L. Nursing Majors. Focuses on adults with health problems related to activity/exercise and cognitive/perceptual health patterns. Critical thinking is used to analyze the effects of changes in health status.

NUR 4216L CLINICAL PRACTICE IN ADULT HEALTH II (3)

NUR 4245 WELLNESS: HEALTH PROMOTION AND MAINTENANCE IN NURSING (2)
Introduction to concepts of wellness and health promotion. Concepts of wellness include nutrition, exercise, rest, activity, spiritual factors and their relationship to wellness and health promotion and application to nursing practice. Open to non-nursing majors.

NUR 4395C SPECIALIZED TECHNIQUES IN CHILD HEALTH ASSESSMENT (3)
Designed to teach the reliable administration and interpretation of the NCAST II and the HOME Instruments. Interobserver reliability will be achieved through observation of parent-child interaction.

NUR 4525 PSYCHIATRIC/MENTAL HEALTH (2)

NUR 4525L CLINICAL PRACTICE IN PSYCHIATRIC/MENTAL HEALTH (1)
PR: NUR 4616, 4616L, 4636, 4636L. Concurrent with NUR 4625L. Nursing Majors. Focuses on clinical intervention using critical thinking and communication skills with clients who require complex psychiatric rehabilitative care. Opportunities are offered to apply knowledge of psychopathology and psychopharmacologic therapies.

HUN 2201 NUTRITION (3)
PR: Course work in chemistry and biology or permission of faculty. Open to majors and non-majors. The study of fundamental principles of normal nutrition as they relate to human life and growth from conception through senescence, interpretation of current nutrition information, and application of nutrition knowledge in the establishment of good eating habits.

NUR 2935 SELECTED TOPICS IN NURSING (1-3)
PR: Cl. Freshman or sophomore standing. Open to non-majors. Content will depend upon student demand and faculty interest and may focus on any area relevant to health care. May involve class, seminar, and/or observational field experiences (non-clinical). May be repeated for credit for different topics.

NUR 3064C HEALTH ASSESSMENT ACROSS THE LIFE SPAN (3)
PR: Admission to nursing major or Cl. Focuses on history taking, physical appraisal skills basic to biopsychosocial assessment across the life span. Emphasizes assessment phase of the diagnostic reasoning process to identify alterations in functional health patterns.

NUR 3113 CULTURE OF NURSING (2)
PR: Admission to nursing major or Cl. Introduction to evolving role of the professional nurse. Examines historical context of nursing's development, nursing's theoretical progressions, and wellness-focused practice as a culture.

NUR 3114 INTRODUCTION TO CLINICAL JUDGMENT (3)
PR: Concurrent with NUR 3114L. Admission to nursing major. Focuses on the basic concepts of health, functional health patterns and communication. Critical thinking is used to analyze the effects of changes in health status and nursing implications.

NUR 3114L INTRODUCTION TO CLINICAL PRACTICE (2)
PR: Concurrent with NUR 3114. Admission to nursing major. Includes laboratory, clinical experiences, and selected psychomotor skills. Beginning application of clinical judgment in implementing therapeutic nursing interventions for adults.

NUR 3145 PHARMACOLOGY IN NURSING PRACTICE (2)
PR: Admission to nursing major or Cl. Examines pharmacotherapeutics; pharmacodynamics; pharmacokinetics; adverse reactions and contraindications; therapeutic indications according to functional health patterns; and nursing implications.

NUR 3215 ADULT HEALTH I (3)
PR: NUR 3113, 3114, 3114L, 3064C. Concurrent with NUR 3215L. Nursing Majors. Examines adults with alterations in health maintenance, nutritional/metabolic, elimination, and sexuality/reproductive functional health care patterns. Critical thinking is used to analyze effects of changes in health status.

NUR 3215L CLINICAL PRACTICE IN ADULT HEALTH I (3)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 4616L</td>
<td>CLINICAL PRACTICE IN FAMILY HEALTH</td>
<td>(3)</td>
<td>PR: NUR 4216, 4216L, 4041. Concurrent with 4611. Nursing Majors. Includes therapeutic interventions for childbearing and childrearing families within a variety of settings.</td>
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<tr>
<td>NUR 4636</td>
<td>COMMUNITY HEALTH</td>
<td>(2)</td>
<td>PR: NUR 4216, 4216L, 4041. Concurrent with 4636L. Nursing Majors and admission to the major for RN or BS students. Focuses on theories/concepts essential to community health nursing, emphasizing illness prevention and health promotion of individuals, families, communities. Roles of community health nurses and environments that affect health are explored.</td>
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<tr>
<td>NUR 4636L</td>
<td>CLINICAL PRACTICE IN COMMUNITY HEALTH</td>
<td>(2)</td>
<td>PR: NUR 4636. Nursing Majors and admission to major for RN or BS students. Provides opportunities to engage in community health nursing practice to promote health and prevent illness with individuals, families, and communities.</td>
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<tr>
<td>NUR 4766</td>
<td>CRITICAL CARE</td>
<td>(2)</td>
<td>PR: NUR 4616, 4216L, 4041. Concurrent with 4636L. Nursing Major or Cl. Basic concepts of rehabilitation related to human responses. Analysis of the changes in health status and nursing implications.</td>
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<tr>
<td>NUR 4792</td>
<td>SEXUALLY TRANSMITTED DISEASES AND HIV INFECTION</td>
<td>(2)</td>
<td>PR: NUR 4616, 4616L, 4636. Open to students and caregivers in health related fields. Examines prevalent sexually transmitted diseases and HIV infection from a nursing perspective. Emphasis is on epidemiologic principles, immunology, treatment, prevention, and ethical/legal considerations.</td>
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<tr>
<td>NUR 4838</td>
<td>LEADERSHIP/MANAGEMENT</td>
<td>(3)</td>
<td>PR: NUR 4636, 4636L. Nursing Majors and admission to major for RN to BS students. Examines health care delivery systems and explores principles of leadership/management and ethical/legal issues within the systems. Skills of leaders and managers are implemented in nursing practice with individuals and groups.</td>
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</tr>
<tr>
<td>NUR 4840</td>
<td>AN INTERDISCIPLINARY PERSPECTIVE ON HIV DISEASE</td>
<td>(3)</td>
<td>PR: Acceptance into the honors program in nursing and Cl. The Honors Seminar is designed to provide selected students with an opportunity to explore major works of nursing in-depth and to present, discuss, and defend a proposal for a research project.</td>
<td>Provides an interdisciplinary perspective on HIV disease. Topics include the etiology, spectrum, and treatment of HIV disease; international perspectives; issues of race, gender, and ethnicity; values, ethics, and their influences on responses to HIV; and how the media has shaped the epidemic.</td>
</tr>
</tbody>
</table>
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Associate Dean for Clinical Affairs
Associate Dean for Continuing Medical Education
Associate Dean for Faculty Affairs
Associate Dean for Faculty Practice Plan
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Associate Dean for Research and Graduate Affairs
Associate Dean for Student Affairs

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Anatomy
Anesthesiology
Biochemistry
Family Medicine
Internal Medicine (Acting)
Medical Microbiology and Immunology
Neurology
Obstetrics and Gynecology
Ophthalmology
Pathology
Pediatrics
Pharmacology and Therapeutics
Physiology
Psychiatry and Behavioral Medicine
Radiology (Acting)
Surgery

College of Nursing

Dean (Interim)
Associate Dean, Undergraduate Studies (Interim)
Associate Dean, Graduate Studies (Interim)
Associate Dean, Student Affairs (Interim)

Director:

Nursing Learning Resource Center
Research

College of Public Health

Dean
Executive Associate Dean

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Provost and Executive Vice President

Dean
Executive Associate Dean

Chairpersons:

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Anesthesiology
Biochemistry
Family Medicine
Internal Medicine (Acting)
Medical Microbiology and Immunology
Neurology
Obstetrics and Gynecology
Ophthalmology
Pathology
Pediatrics
Pharmacology and Therapeutics
Physiology
Psychiatry and Behavioral Medicine
Radiology (Acting)
Surgery

College of Nursing

Dean (Interim)
Associate Dean, Undergraduate Studies (Interim)
Associate Dean, Graduate Studies (Interim)
Associate Dean, Student Affairs (Interim)

Director:

Nursing Learning Resource Center
Research

College of Public Health

Dean
Executive Associate Dean

ACADEMIC AFFAIRS

Provost and Executive Vice President

Dean
Executive Associate Dean

Chairpersons:

Anatomy
Anesthesiology
Biochemistry
Family Medicine
Internal Medicine (Acting)
Medical Microbiology and Immunology
Neurology
Obstetrics and Gynecology
### College of Arts and Sciences

**Chairpersons:**
- John W. Rowe, Jr.
- Richard L. Meyer

**Directors:**
- Robert M. Keith
- David W. Gray
- M. Scott Faris
- Cheryl Burbano
- DICK J. PUGLISI
- JAMES L. PAPPAS
- Paul H. Cheney

### College of Education

**Dean:**
- STEVE PERMUTH

**Chairpersons:**
- Edward Glickman
- Constance Hines
- JANE YOUNG

**Directors:**
- William Blank
- Frank Freshour
- Arthur Shapiro
- Bruce Hall
- Chris Doane
- Michael Curtis
- H. Edwin Steiner
- James Paul

### College of Business Administration

**Dean:**
- ROBERT L. ANDERSON

**Associate Dean of Administration and Undergraduate Studies:**
- Thomas E. Ness

**Associate Dean of Graduate Studies and Research (Acting):**
- Richard L. Meyer

**Associate Dean for Public Affairs:**
- Richard T. BOWERS

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**Program Directors:**
- Interdisciplinary Social Sciences: RICHARD J. GAGAN
- International Studies: DARRELL SLIDER
- Political Science: LAWRENCE W. MOREHOUSE
- Public Administration: WILLIAM J. PAMMER

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**College of Business Administration**

**Chairpersons:**
- Economics: JOHN W. ROWE, JR.
- Finance: RICHARD L. MEYER
- Information Systems/Decision Sciences: PAUL H. CHENEY
- Management (Acting): G. ALAN BALFOUR
- Marketing: WILLIAM LOCANDER

**Directors:**
- School of Accountancy: ROBERT M. KEITH
- Center for Economic and Management Research (Acting): DAVID W. GRAY
- Small Business Development: M. SCOTT FARI
- Professional Development Center: CHERYL BURBANO
- Center for Economic Education: DICK J. PUGLISI
- Institute For Banking and Finance: JAMES L. PAPPAS
- Institute for Information Systems Management: PAUL H. CHENEY
- MBA Programs: STEVEN A. BAUMGARTEN
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| College of Fine Arts | |
| Dean | |
| Associate Dean, Academic Affairs | |
| Associate Dean, Administrative Affairs | |
| Coordinator, Advising | |
| Chairpersons: | |
| Art | |
| Dance | |
| |

| Florida Mental Health Institute | |
| Dean | |
| Associate Dean | |
| Assistant Dean | |
| Director, Administration | |
| Chairpersons: | |
| Aging & Mental Health | |
| Child & Family Studies | |
| Community Mental Health | |
| Mental Health Law & Policy | |
| Directors: | |
| State Liaison | |
| Florida Autism Program | |
| Research & Training Center for Children's Mental Health | |
| The USF Center for HIV Education & Research | |
| Professional Development Center | |

| School of Architecture and Community Design | |
| Dean | |
| Associate Dean | |
| Assistant Dean | |
| Director, Administration | |
| Chairpersons: | |
| Aging & Mental Health | |
| Child & Family Studies | |
| Community Mental Health | |
| Mental Health Law & Policy | |
| Directors: | |
| State Liaison | |
| Florida Autism Program | |
| Research & Training Center for Children's Mental Health | |
| The USF Center for HIV Education & Research | |
| Professional Development Center | |

| School of Continuing Education | |
| Dean (Interim) | |
| Associate Dean | |
| Assistant Dean | |
| Director | |
| Chairpersons: | |
| Arts and Sciences | |
| Business Administration | |
| Education | |
| Engineering | |
| Fine Arts | |
| FMHI | |
| Directors: | |
| Administration | |
| Community Music | |
| Conferences and Institutes | |
| English Language Institute | |
| Executive MBA | |
| Florida Center for Writers | |
| Institute of Government | |
| Division of Lifelong Learning | |
| Marketing | |
| MBA Program for Physicians | |
| Mediation Institute | |
| Professional Development Center (Acting) | |
| Senior Programs | |
| Special Programs/PACE (Acting) | |
| College Liaison: | |
| Arts and Sciences | |
| Business Administration | |
| Education | |
| Engineering | |
| Fine Arts | |
| FMHI | |

| Graduate School | |
| Dean (Interim) | |
| Associate Dean | |
| Assistant Dean | |
| Director | |
| Chairpersons: | |
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| Education | |
| Engineering | |
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### Undergraduate Education and Community College Relations

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<td>STUART SILVERMAN</td>
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<td>Director, Evaluation and Testing</td>
<td>TERESA FLATBEY</td>
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### USF at Fort Myers

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<tr>
<td>Campus Dean and Executive Officer</td>
<td>DAVID C. MCCORMICK</td>
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<tr>
<td>Director, Administration and Finance</td>
<td>JULIE KONZAK</td>
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<tr>
<td>Director, ECC/USF Learning Resources</td>
<td>CHARLES RITCHIE</td>
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### USF at Sarasota

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<tr>
<td>Dean and Executive Officer of USF - Sarasota</td>
<td>DAVID P. SCHENCK</td>
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<tr>
<td>Associate Dean</td>
<td>JANNA C. MERRICK</td>
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<tr>
<td>Campus Librarian</td>
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<td>Director, Administrative Affairs</td>
<td>LYNDA BLOCK HILL</td>
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<tr>
<td>Director, Development</td>
<td>SANDRA KRAWETZ</td>
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<tr>
<td>Director, Media Center</td>
<td>MARY K. ANDREWS</td>
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<td>Director, Physical Plant</td>
<td>THOMAS J. PENN</td>
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<td>Director, Police Services for Regional Campuses</td>
<td>WILLIAM F. KELLY</td>
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<tr>
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<td>NANCY E. FERRARO</td>
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### New College of USF

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<tr>
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### USF at St. Petersburg

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<tr>
<td>Dean and Executive Officer</td>
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<td>HERMAN J. BRAMES</td>
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<td>Director, Development</td>
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<td>Director, Poynter Library</td>
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<td>Director, Student Affairs</td>
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### USF at Lakeland

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<tr>
<td>Campus Dean and Executive Officer</td>
<td>YVONNE L. RALSTON</td>
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<td>Director, Academic Support Services</td>
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<td>Director, Business, Finance, and Auxiliary Services</td>
<td>ANNE PHILLIPS</td>
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### Administrative Services

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<tr>
<td>Vice President</td>
<td>ALBERT C. HARTLEY</td>
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<td>RICKARD C. FENDER</td>
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<tr>
<td>Director, Auxiliary Services</td>
<td>JEFFREY A. MACK</td>
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<tr>
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### Budgets, Human Resources and Information Technology

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<tr>
<td>Vice President</td>
<td>LAUREY T. STRYKER</td>
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<td>Associate Vice President, Equal Opportunity Affairs</td>
<td>EDOUARDO L. PIOU</td>
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<tr>
<td>Sr. Director, Information Technology</td>
<td>CLAIRE S. ROBINSON</td>
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<td>Director, Central Florida Regional Data Center</td>
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<td>Director, Human Resources</td>
<td>TRUDIE E. FRECKER</td>
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<td>Director, Information Technologies</td>
<td>GEORGE W. ELLIS</td>
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<td>Director, Institutional Research &amp; Planning</td>
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<tr>
<td>Director, Organizational Development &amp; Training</td>
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<td>PAULA VARNES</td>
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<td>Coordinator, Victims' Advocacy</td>
<td>MARY C. POOLE</td>
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### Research

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<td>Vice President</td>
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<td>Executive Assistant, Administration</td>
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<td>President, Research Foundation</td>
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<td>Director, Comparative Biomedicine</td>
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<td>Director, Compliance Services (Acting)</td>
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<td>Director, Patents &amp; Licensing</td>
<td>KENNETH G. PRESTON</td>
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<td>Director, Sponsored Programs (Acting)</td>
<td>PRISCILLA POPE</td>
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### Student Affairs

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<tr>
<td>Vice President</td>
<td>HAROLD L. NIXON</td>
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<td>Associate Vice President for Student Life &amp; Wellness</td>
<td>WILMA J. HENRY</td>
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<td>Associate Vice President for Enrollment Planning &amp; Management</td>
<td>BRUCE A. BURSACK</td>
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<td>Assistant Vice President for Academic Support &amp; Achievement</td>
<td>THERLE M. BENTON</td>
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<td>Assistant Vice President for Enrollment Planning &amp; Management and University Registrar</td>
<td>LINDA ERICKSON</td>
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<td>COBB, PAULA G.</td>
<td>Assistant Professor (Marine Science) 1992</td>
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<td>COHEN, DONNA F.</td>
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<td>COOK, JOAN A.</td>
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<td>COOK, STEVEN A.</td>
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<td>COLLINS, WILLIAM T.</td>
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<td>COLLINS, WILLIAM T.</td>
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<tr>
<td>COLLINS, WILLIAM T.</td>
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<td>COLLINS, WILLIAM T.</td>
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<td>COHEN, JOSEPH H.</td>
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<td>COHEN, BARBARA H.</td>
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HELTON, WENDY, Program Director (Adult and Vocational Education), 1990
B.S., M.A.T., Indiana University, 1970
HENCHEY, JENNIFER A., Associate Professor (Radiology), 1993
B.A., M.D., Vanderbilt University, 1988
HENCKELL, KARSTEN, Associate Professor (Mathematics), New College, 1986
B.S., M.Phil., Columbia University, 1985
HENDERSON, J. NEIL, Associate Professor-Coordinator (Suncoast Gerontology Center), 1995
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HENDERSON, PATRICIA, Associate Research Scientist, 1994
B.S., M.S., University of South Florida, 1979
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HENDRY, CAROLE F., Coordinator & Instructor (Arts & Sciences), 1967
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HENLEY, JOHN , Professor (Internal Medicine), 1976
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B.S., Ph.D. University of South Florida, 1993
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M.D., Creighton University, 1969
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HOF, ANDREW M., Research Associate (Center for Micro Electronics), 1986
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HOFMAN, HUBERT A., Professor (Professional Physical Education), 1983
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HOFMANN, MITCHEL S., Associate Professor (Obstetrics and Gynecology), 1985
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HOFMANN, RICHARD P., Associate Dean - Associate Professor (Internal Medicine), 1993
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HOGAN, DANIEL J., Professor (Internal Medicine), 1993
M.D., Dalhouse University, 1976
HOGARTY, KRISTINE Y., Research Assistant in (Criminology), 1995
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HOLCOMB, DAN L., Associate Professor-Assistant Director (Physical Education Facilities and Administration), 1965
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HOLMES, JOAN B., Professor (Visual Arts) (Christian Scholarship), 1987
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B.S., M.S.N., University of Miami, 1987
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B.S., Florida State University, 1994
HUFFMAN, JOAN B., Assistant Professor (Surgery), 1995
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HUG, WILLIAM G., Professor (Dance), 1995
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HUGHES, PATRICK R., Research Professor (Psychiatry), 1988
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B.A., M.A., Ph.D., University of Iowa, 1972
HUMPHEY, DEBORAH, Assistant Professor (Internal Medicine), 1995
B.A., D.O., Southeastern University, 1991
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